



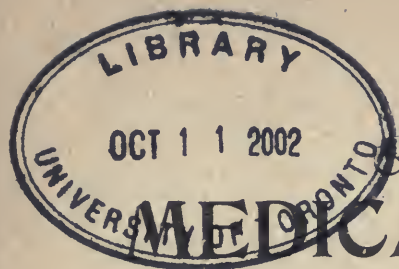
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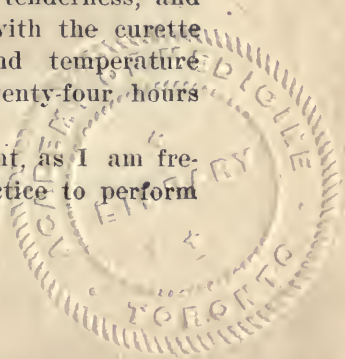
PROGRESS OF GYNAECOLOGY.

By A. LAPHORN SMITH, M.D., M.R.C.S., England.

Professor of Gynaecology in the University of Vermont, Burlington, and Professor of Clinical Gynaecology in Bishop's University, Montreal. Surgeon to the Western General Hospital and Surgeon-in-Chief of the Samaritan Free Hospital for Women, Gynaecologist to the Montreal Dispensary and Consulting Gynaecologist to the Woman's Hospital.

In the December number of the "Annals of Gynaecology" there is an interesting article by Dr. Frank Higgins on the treatment of infections after abortions and confinements, as carried out at the Boston City Hospital. We find the symptoms are practically the same in both classes of cases. The majority of abortions were criminal ones, these alone necessitating a stay in hospital of 1,469 days for 81 cases, and five of them died. He thinks it time that laws should be made stringent enough to put a stop to the work of the abortionist. He is a strong advocate of the curette and antiseptic douching. "It is a common occurrence," he says, "to see patients enter the hospital with all the symptoms of an impending acute septicaemia from an abortion either complete or incomplete, with a high temperature ranging from 103 to 105 degrees, and a pulse from 120 to 130 per minute, with foul discharge and uterine tenderness, and after complete emptying of the uterus with the curette and antiseptic douching, the pulse and temperature rapidly fall to normal, often within twenty-four hours and usually within two or three days.

"I can heartily endorse this statement, as I am frequently called by friends in general practice to perform



this little operation, and experience has so convinced them and me of the efficacy of it in removing all alarming symptoms that some of them call me in to every case in which there is either severe hemorrhage or temperature, while I feel so sure that it will practically cure the patient that I do not have to see her again or at the most just once to remove the gauze drainage. In using the dilator and the curette, I think great care should be taken not to perforate or lacerate the body of the uterus which is very soft and pliable in these cases. When possible, I prefer the finger, which is less liable to do harm." He also calls attention to the liability to retroversion, prolapse and pus tubes after abortion, and especially if they are allowed to remain septic. "Each year many patients enter the gynaecological wards with various forms of pelvic disease, whose origin is directly traceable to a previous abortion or septic puerperium." With regard to the anti-streptococcus serum, he thinks it is very dangerous; it was employed in five cases and four of them died. "Its effects," he says, "on the patient are very depressing; its use is not without danger, and it should be employed with great care, in moderate doses and then only in the most serious cases. Of the cases of puerperal septicaemia," he says, "numerous instances of fresh lacerations of the cervix are found among the infectious cases, and the writer believes that these fresh tears are the avenue by which the infectious material gains an entrance in many patients." At present the opinion of gynaecologists is not in favour of the immediate repair of lacerated cervix, although it has been done in a few cases. It is possible, however, that opinion may change and that it will be done as a matter of course in every case.

In the same journal Dr. Kaan, of Tuft's Medical College, Boston, makes a strong plea for the non-operative treatment of prolapse and retroversion. He admits that there are many objections to the pessary on the part of physician and patient, and that, according to the knowledge, judgment and mechanical skill of the practitioner, will be useful, useless or injurious. The most usual error is to choose too large a size. He calls attention to the

necessity for hygienic regulations of food, dress and evacuations. ("While I prefer to treat retroversion and prolapse by Alexander's operation of shortening the round ligaments or ventrofixation combined with restoration of the perineum, yet I deem it my duty to avoid operations when possible, and I quite often make a complete cure without them in cases where there are no adhesions, simply by lightening the weight of the uterus, diminishing intra-abdominal pressure, and by toning up the muscles of the patient generally by tonics, proper food, exercise, fresh air and sunlight. As to the choice of pessaries, I prefer the soft, spiral ring if the patient can come to me once a month for examination; if there is no tenderness the hard rubber Hodge pessary may be left in for two or three months, as it is much easier to keep clean. In either case a cleansing douche of plain hot water should be used once or twice a week.")

Curretting the Uterus for Endometritis.—Dr. Augustin H. Goelet (in the "New England Medical Monthly" for April) has a timely article on "the abuse of the curette." He says curetting is too often done in obscure pelvic conditions where no diagnosis is made. "The general surgeon," he says, "who should stick to his own branch, which it is to be hoped he understands better than he does this, too often commits the error of attempting this operation, which he should leave to the gynaecologist. This same practitioner would not attempt an operation for strabismus, though it is far more simple, requires less skill and judgment and is fraught with less risk to his patient." Dr. A. H. Goelet makes a great distinction between the sharp and dull curette; every practitioner should be provided with a dull curette with large fenestra and a reliable placenta forceps for removing retained placental debris after abortion. He should not attempt it with a small curette nor a sharp one, as is too often done. Not infrequently curetting for endometritis is followed by metritis and pelvic peritonitis. How often this is due to harsh and needless traumatism and how often to imperfect, crude technique, unclean methods or neglect of proper after-treatment cannot be estimated. He also calls attention

to the mistake which is often made of packing the cavity of the uterus and cervical canal tightly with gauze and leaving the channel blocked for five or six days. Drainage, he says, must be maintained and the surfaces kept clean by irrigation of the cavity until a normal endometrium has been reproduced. He finishes the operation by irrigation with hot solution of compound tincture of iodine, one ounce to the pint. (I apply equal parts of pure carbolic acid and Churchill's tincture of iodine on an applicator through a cervical speculum which is removed as soon as the applicator has reached the fundus). Subsequent treatment will consist of another thorough irrigation through the double current catheter, with a hot solution at the end of forty-eight hours, and repeated every second day for at least a week, during which time the patient is kept confined to bed. At the expiration of a week she is permitted to get up if there is no rise of temperature and no pain, and the irrigation of the cavity of the uterus is repeated every second or third day at the office as long as any discharge continues, or there remains in the cavity anything to be washed away. The same author has written an interesting article in the "St. Louis Medical Review," June 30, on senile degeneration of the endometrium, diagnosis and treatment. The symptoms resemble in some respects those of cancer—there is an offensive discharge in a woman well advanced in years past the menopause, with an emaciated cachetic condition of the system, associated with which there may be a granular erosion of the cervix or about the external os and a history of more or less irregular bleeding. There will be impaired digestion, loss of appetite, insomnia, nervousness, cold extremities and a poor circulation, an itching of the skin not necessarily confined to the genitals, headache, particularly at the top of the head or below the occipital region and backache referred to the lumbar or sacral region. There is a pent-up discharge within the uterus which decomposes, and, when its presence in sufficient quantity sets up contractions and is expelled, it burns and excoriates the vagina and vulva, which will then become covered with red spots, especially if it is very acrid. The treatment which Dr.

Goelet advocates is summed up in the one word, drainage, which he thinks is best obtained by the negative pole of the galvanic battery, five or ten milliamperes for three to five minutes, just sufficient to cause relaxation and to allow the electrode to move freely through the canal. At first these applications may be extremely painful, but usually after the second or third, no pain will attend them. They should be continued twice a week until there is no more diseased discharge to drain, by which time the irritation of the vulva and vagina is relieved. (I can testify to the success of this treatment in several of my own cases. At the same time I give my patients an alkaline mixture, and I apply yellow oxide of mercury ointment to the vagina to protect it from the discharge until the latter has been stopped).

NOTES FROM THE CASE BOOK OF A GENERAL PRACTITIONER.

By FRANCIS W. CAMPBELL, M.D., L.R.C.P. L., D.O.L.

Dean and Professor of Medicine, Faculty of Medicine, University of Bishop's College.

The following cases are taken from my note-book, and are not intended to be exhaustive. Their brevity clearly shows this, for they are but outlines, yet I hope clearly showing the practical results in each.

HYDROCELE.

Case 1.—H. G., aged 36, consulted me some years ago for an enlarged scrotum. On examination I found it had been growing gradually for about six months—was on left side, pyriform in shape, fluctuating, and, on being tested by a candle in a dark room, showed it to be clear and translucent. There was no difficulty in making the diagnosis of hydrocele. The question of treatment had to be decided upon. Palliative treatment, viz., evacuating the contents of the sac and then using pressure by means of adhesive plaster or collodion, I had never known to be successful. I therefore determined to operate for the radical cure of the disease. Having during my attendance at the Royal Infirmary, Edinburgh, seen the great Scotch surgeon,

Symme, operate often for this disease, I determined to follow the plan he advised. I accordingly evacuated the contents of the tunica vaginalis, by plunging a small trocar into the sac, grasping the organ below, between the thumb and fingers of the left hand, so as to fix and distend the tumour. In making the plunge with the trocar, you must bear in mind that it should be slightly downward, so as to avoid the testicle, which is generally situated posteriorly and near the median raphe. Having the contents evacuated, I injected, by means of a glass syringe, about a drachm of the compound tincture of iodine, of the strength of 72 grains of iodine and 24 grains of iodide of potash to the ounce of alcohol. With my left hand I then seized the bag, and kneaded it so as to bring every part of the sac in contact with the iodine. The pain for a few minutes was very great, but soon subsided. The patient was put to bed, and the bag supported on a small pillow. The following day there was considerable swelling, which, however, gradually subsided, and in ten days the patient was allowed out, and a few days later was able to get to his work. I have notes of fifteen cases like the above, where iodine was used for the radical cure. All were cured by the first injection except three cases, two of which required a second injection and one a third injection before the case was complete. In only two cases was there severe inflammation following the injection. It was, however, easily subdued by a solution of sugar of lead and opium. All the cases were obliged to rest in bed after the operation, but in not any of the cases did this rest exceed two weeks, and in several only a few days. Modern surgery seldom uses the means I have detailed. It generally pins its faith to alcohol, a five per cent. solution of carbolic acid, corrosive sublimate, sulphate of zinc, chloride of zinc, none of which are in my opinion equal to the plan I have invariably followed. A few years ago a surgeon, with an unpronounceable name, recommended, after having evacuated the fluid, to introduce through the canula a catgut three and twenty centimetres (about nine inches) in length. This thread induces, by mechanical irritation, an adhesive inflammation of the serous surfaces, a vagina-

litis obliteran, and in a few days the thread is absorbed. Some authors claim that the thread is absorbed so quickly that not sufficient irritation is produced to cause the opposing surfaces to unite. It has therefore been recommended to steep the thread in some irritating liquid, such as the per chloride of iron. The results are said to be excellent, and it is said that the patient can return to his work in twenty-four hours, or at most, two days—a matter of some importance to a labouring man.

ERYSIPELAS.

Case 2.—F. N., aged 32, telephoned me about half-past eight in the evening, stating that he believed he was threatened with erysipelas, as a red spot had since tea-time showed itself on the left side of his nose. He desired to come to my office and see me, but feared he could not get off inside of an hour. About ten o'clock he was in my consulting room, and stated that, since he had telephoned me, there had been a decided increase in the redness, which now extended up to the forehead, and across the cheek for at least an inch. It was tight feeling and glazed. His diagnosis was correct. It was a case of erysipelas. The tongue was slightly coated; there was slight headache, and the pulse was about 90. The circumstances of this patient were peculiar. He was in the midst of preparations for a series of entertainments to be given by children. To be laid up for more than two or three days meant giving up entirely these entertainments, and great financial loss. This he fully explained, under considerable excitement, and asked me to do my best for him. After a few moments' consideration, I decided to follow a suggestion made me some years ago by Surgeon Lieut.-Col. Codd, of the Royal Canadian Dragoons, Winnipeg, while I occupied similar rank in the Royal Regiment of Canadian Infantry. This was to brush the inflamed part with the fluid extract of ergot three times a day. I had tried it upon two soldiers in my military hospital at St. Johns, and once in private practice. The results I might almost say were remarkable. I accordingly gave my patient a prescription for

fluid extract of ergot, with the necessary instructions for its application by means of a camel's hair pencil. I also gave him to take at bedtime ten grains of calomel, with five grains of carbonate of soda. He was directed to remain in bed till I called next day. On making this visit he informed me that, before reaching home with the prescription, the disease had spread still further. He had applied the ergot three times, and he not only said there had not been any extension since, but that it felt much improved. I visited him next day, which was Sunday, and the patient was, comparatively speaking, well. He was directed to make one more application of the ergot. I would have liked to have kept him in the house another day, but his business was urgent, so I permitted him to return to work on the Monday morning. No ill effects ensued. The theory of the action of the ergot is that it produces marked contractions of the small blood vessels, and thus diminishes the blood supply.

ASCITES.

Case 3.—There are several causes which produce ascites, but the chief is obstruction of the portal vein, within the liver, from cirrhosis of that organ. Some think that the disease ought not to be considered as a distinct disease, but simply a symptom developing in the course of the affection which produces it. The case I propose to give a brief outline of was undoubtedly due to chronic alcoholism. When I first saw G. McD. in 1895 he complained of a general hepatic uneasiness with dyspeptic symptoms and occasional vomiting. There was distinct although not very great hepatic enlargement downward. This continued for about a month, when dullness began to diminish, and by the end of three months this diminution was well marked. This condition continued for rather more than six months, the only additional symptoms being some emaciation and a sallow tint to the skin. During all this time, with an occasional day or two off, the patient continued to follow his employment, that of office work. Two months later, i.e., about a year from the time he first consulted me, he began to complain of abdominal

enlargement, which was recognized as commencing ascites. He was ordered to bed, and, after a couple of weeks' rest there, was allowed up and about the house. The accumulation of fluid was slow, so slow indeed that he was able to move around the house for at least six months after, just taking to bed when he was compelled to. The fluid now began to accumulate rapidly in the peritoneal cavity, and oedema of the extremities showed itself. The patient had been treated by purgatives, diuretics and diaphoretics ever since ascites began to show itself, and there had been no appreciable benefit. A month later, i.e., about a year and a half from the time he first consulted me, he presented the following condition. Emaciation considerable, anemia marked, skin of a decided icteroid hue. Abdomen largely distended with fluid, which, pressing on the diaphragm, interfered with breathing, and patient was unable to lie down. Abdomen shows distended superficial veins and measures at the umbilicus 43 inches. The oedema of the extremities is extreme and extends to Poupart's ligament. The limbs are so heavy that it is almost impossible to lift them from the bed. This oedema of the legs is largely due to pressure on the return circulation by the ascites, and partly on account of the anemia and increasing pressure of the blood in the capillaries. There was a small quantity of albumin in the urine which was scanty in amount. Under the microscope there were no casts. Regarding the case, as threatening a somewhat speedy, fatal termination, a consultation was held principally to settle the question of tapping. After fully discussing this operation, it was decided to postpone it for a short time. The very serious condition of the patient was placed before his wife. The evening after the consultation I determined to place my patient on what is sometimes called Addison's pill, and which is as follows:

R Pulv. digitalis.....gr. xxiv.
 Pulv. scillae.....gr. xii.
 Pil hydrarg..... ʒi.
 Div. in pil, No. xxiv. One to be taken night and morning.

Within a week of commencing this pill the improvement was most marked; the amount of urine passed was

trebled in quantity, and the abdominal distension and oedema of legs decidedly diminished. After three weeks the pill was discontinued, as the bowels were so relaxed as to weaken the patient. After a week the pill was resumed, now giving it twice a day, and then only one the next day, and continuing in this way. By this method the bowels were kept open, but not relaxed. In two months the abdominal growth had been reduced from 43 inches to 39 inches, and the oedema of the legs all gone, except about the ankles. His general appearance had greatly improved, the icteroid hue being much less; appetite good and patient enjoyed his food. The patient is able to lie down with comfort, and has comfortable sleep. He was now allowed out of bed for a short time daily, the time being increased gradually. In two months more, that is, four months from commencing the pills, now given three times a week, the abdomen measured 33 inches, and there was no discoverable evidence of fluid in the peritoneum. All oedema has disappeared from the legs. Patient was now allowed out every few days for a drive and to move freely about the flat on which was his bedroom. In two months more, i. e., six months from commencing the pills, which were still continued twice a week, the patient was able to walk a mile. From this time the convalescence was rapid and marked, and the pills were discontinued. In a year from the time they were first given, the patient declared himself to be perfectly well, and his general appearance was better than it had been for seven or eight years. I made my last visit to him in January, 1898, when I carefully examined his liver, which showed a marked diminution in size. Since that date he has had really excellent health, and so continues at the date of this writing (Sept., 1901). There is no doubt in my mind that this pill saved this patient's life. The physician who saw the case in consultation as well as myself did not consider it possible that the patient could last more than two or three months, even although temporary relief to his distress might have been subsequently given by tapping. I have since this

case had two other cases of ascites where the administration of this pill gave excellent results; one is still alive, the other died a few months ago from an attack of acute pneumonia.

Case 4.—Acute cystitis of an idiopathic character is not very often met with; on the other hand, subacute cystitis, due to cold, very often the result of sitting on stone or grass, is not by any means uncommon. In my experience of nearly forty years I have met many such cases. Generally they are fairly promptly relieved by a hot bath, and the administration of twenty to thirty grains of bi-carbonate of potash with twenty drops of tincture of hyosciamus every four hours, in half an ounce of camphor mixture. Now and again I have met with a case which did not improve on this mixture. Such is the case I now briefly record. J. B., clerk in a wholesale house, obliged to be on his feet most of the day, consulted me for frequent and painful micturition, which from the history he gave me was due to sitting for some hours on grass at a picnic. He was fond of music and played an instrument, and passed at least two or three evenings a week at musical *soirees* at which ladies were present. He was obliged to discontinue this method of enjoyment, for he was not able to retain his urine for more than an hour when he had an irresistible desire to pass it. Before coming to me he had consulted a medical friend of mine, whose prescription he showed me. The treatment was the administration of alkalies, and had not given him any relief. The urine was clear and very acid. There were no abnormal constituents. He was low spirited and anxious, fearing some chronic bladder trouble. I accordingly decided to give him one drachm of Sanmetto every 4 hours. Within twenty-four hours he had received some relief, and inside of a week was so well that he was able to take his place among his musical friends. After this his recovery was rapid, and in two weeks he declared himself perfectly well. Since the case came to me I have had several of a similar character, all of which I have treated satisfactorily with Sanmetto.

STRUMOUS OPHTHALMIA.

Case 5.—In my early years of practice, and before eye specialists were much in evidence in Montreal, cases of this disease were not at all uncommon in my practice. But of late years they have been comparatively few. About five years ago, at one of my clinics in the General Hospital, a woman forced her way into the room against the will of the porter. She had a child in her arms, whom he claimed, and correctly, was a patient for the eye department. The woman, however, begged to see me, and I at once recognized the child, a boy, aged two and a half years, to be suffering from strumous ophthalmia, and, a large number of students being present, I took advantage of the case to give a clinic on this disease, after which I told her she must go to the eye department for treatment. A few days later she came to my office and told me that for nearly three months she had taken the child regularly to an hospital eye clinic without its receiving the slightest benefit. She asked me to treat the child, admitting poverty, but promising some remuneration (which I never received). The condition of the little patient was as follows:—The fists of both hands were pressed up against the eyes, while the head was bent on the chest, so as to cut off as much light as possible. The eyelids were inflamed, and thick, whitish yellow matter oozed from each. It was impossible to examine the condition of the eye, owing to the struggles of the little patient. The mother was instructed as to the necessity of keeping the eyes clean with pieces of absorbent cotton, and a few drops of a five grain to the ounce solution of nitrate of silver were placed in the angle of the eye, and by manipulation made their way under the eyelids. The child was ordered a teaspoonful of pure cod liver oil three times a day. For a week the child was brought daily to my office without there being any visible improvement. I then increased the nitrate of silver solution to ten grains. In a few days there was a marked decrease in the amount of discharge and the silver solution was now only used three times a week. In six weeks the discharge was entirely gone, and examination showed the eyes to be healthy, but weak. The lids were

only opened on dull days, and in partially darkened rooms. A solution of sulphate of zinc, one quarter of a grain, with ten drops of vinum opii to the ounce of camphor water was ordered to be used as a collyrium night and morning, and the cod liver oil to be continued in the same quantity. I saw no more of the child for a little over a month, when it was brought to me absolutely cured. The cod liver oil was directed to be continued for three months longer and the collyrium discontinued. The child was not seen by me again. Two years later a similar case came under my care, having been advised by the mother of the first patient to consult me. This case, a boy four years old, had also been to an eye clinic of an hospital for several months and had not benefited in the slightest. The symptoms of this second patient were identical with the first, and the treatment was practically the same, with the exception that I used Wampole's cod liver oil, as the child could not take the pure oil. When I was able to examine the eyes, on one I found a somewhat large ulcer on the conjunctiva, which healed in about three weeks after being touched with a fine point of solid nitrate of silver, and the use of a collyrium similar to what I used in the first case. In about three months after coming under my care, this patient was able to go about the house, in well lighted rooms and out on dull days. In six months he was absolutely well. In neither case has there been subsequent eye trouble. Cod liver oil had not been prescribed at the hospital eye clinic in either case.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD MCCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

CONCLUSIONS IN REGARD TO THE CLINICAL VALUE OF THE FOLLOWING NEW HYPNOTICS.

Hedonal, we would say, is applicable to slight forms of insomnia unassociated with bodily pain or severe mental excitement. It is valuable as a "placebo," having a direct though not very powerful tendency to produce sleep. Patients take it quite readily, and it should be useful in a very large class of cases in general practice.

Chloretone is a powerful and pretty certain hypnotic if given in sufficient doses. Its general use to produce sleep, however, should be discouraged on account of its secondary effects. But these very defects may make it especially valuable in certain selected cases. Its action should always be carefully watched. The disagreeable subjective sensations it may produce are oftentimes insurmountable objections to its employment.

Dormiol.— While certainly not the most powerful sedative that we possess, dormiol answers well the requirements for a generally serviceable hypnotic. Its rapidity of action, we believe, is unsurpassed by any other hypnotic taken internally. This characteristic, together with its ease of administration, reliability in almost all forms of insomnia unattended with great bodily discomfort, and almost total absence of any after effects, subjective or objective, make it one of the most valuable acquisitions to the physician's armamentarium of recent years. It probably will win a place in the Pharmacopeia.—*The Virginia Medical Semi-Monthly*.

DISINFECTION OF THE URINE.

Dr. N. B. Gwyn has recently reported the results of an investigation into the comparative value of various disinfectants, in rendering sterile, urine containing typhoid bacilli. It was found that milk of lime is neither rapid nor certain in action. Carbolic acid proved of value only in large amount, or in very strong solution. Mercuric

chloride, on the other hand, acted as a powerful and rapid disinfectant, only a small amount being required, and having the further advantage of being clean, odourless and easily applied. Formaldehyde was found to be a fairly efficient disinfecting agent, but its cost precluded its use in any but dilute solution. Chlorinated lime prepared in saturated solution and using the supernatant fluid proved itself a most reliable disinfectant, free chlorine being evolved in addition to the urine.

For disinfection of the urine in the bladder and the urinary system, utropine administered by the mouth has been employed, with the results more or less satisfactory. Solutions of mercuric chloride, 1 to 100,000 or 1 to 50,000 may be employed for irrigation to the bladder, and with some assurance that any bacilli in this viscus will be destroyed.

In obstinate hiccough, gargling with ice water has succeeded in stopping the spasms after all other measures had failed.

Ingalls and Yeager report 36 cases of smallpox treated with baths of bichloride without any deaths. The series included 13 confluent cases and one of the hemorrhagic form. The suppurative fever was shortened, pitting was much less and the offensive odour absent.

BRONCHITIS.

Dr. Leech has done good service in calling attention to the fact that the drugs useful in bronchitis are generally given in inadequate doses. In the treatment of acute bronchitis there is no better combination of drugs than that of acetate of ammonium, spiritus etheris nitrosi and ipecacuanha or antimony. Liquor ammonii acetatis is generally prescribed in drachm doses to be given every four hours; it should be given in doses of three drachms and increased to six drachm doses if the skin does not act freely. Since marked relief to the breathing often accompanies the sweating, sweet spirits of nitre should be given in two-drachm doses and repeated at short intervals. This author considers antimony in one-twentieth of a grain dose is of most service in moist bronchitis with oppressed breathing, and that, in the dry form with tight cough, ipecac should be given. If the carbonate of ammonium is used it should be dissolved in water, and the dose, at least five grains, should be given in milk and repeated every hour or two.—*Four. Med. and Science.*

HOW TO READ THE TONGUE.

The perfect tongue is clean, moist, lies loosely in the mouth, is round at the edge, and has no prominent papillæ. The tongue may be furred from local cause or from sympathy with the stomach, intestines or liver. The dry tongue occurs most frequently in fever, and indicates a nervous prostration or depression. White tongue is diagnostic simply of the feverish condition, with perhaps a sour stomach. When it is moist and yellowish brown it shows disordered digestion. Dry and brown indicate a low state of the system, possibly typhoid. When the tongue is dry and red and smooth look out for inflammation, gastric or intestinal. Sharp pointed red tongue will hint of brain irritation or inflammation, and a yellow coating indicates liver derangement. When so much can be gained from an examination of the tongue how important it is that the youngest child should be taught to put it out so that it can be visible to the uttermost point in the throat.—*Four. Med. and Surgery.*

DYSENTERY.

Sulphur successfully is used in the treatment of dysentery. Twenty grains of sublimed sulphur are combined with five grains of Dover's powder, to be given four-hourly. In all of the cases that have been treated with sulphur the recovery has been rapid, and the patient has seemed to derive relief more speedily from his pain and straining than with other methods of treatment. The cure with sulphur seems to be more certain and stable, as chronic conditions and relapses have not occurred. Blood and mucus are easily stopped and the motions quickly become fecal. In some cases the number of motions per diem did not at once diminish, but the pain and straining were lessened and the character of the motions became more fecal and contained little or no blood. As soon as the diarrhœa becomes less it is advisable to give the powders less frequently.—G. E. Richmond, *in Lancet.*

THE CONDITION OF THE KIDNEYS WITH REFERENCE TO THE EMPLOYMENT OF DIURETICS.

D. Arthur R. Elliott (*Med. News*, August 10, 1901).—Except in the case of the irritant-epithelial diuretics, the entire class of diuretics may be said to exert their effect upon the urine by acting indirectly through the circulation. Owing to the necessity for sparing the kidneys all

irritation, drugs given for diuretic purposes should act indirectly rather than directly, consequently the secretory diuretics are contraindicated in irritative and inflammatory renal conditions. In functional urinary disorders diuretics are contra-indicated in irritative and inflammatory hyperacidity of the urine. To accomplish this, simple diluents and salines are best adapted. In acute nephritis saline diuretics are permissible throughout the entire course of the disease and exert a beneficial influence by increasing elimination and clearing the tubes of inflammatory debris. Subcutaneous saline infusion constitutes our most powerful eliminant in desperate cases. In chronic nephritis the cardio-vascular diuretics are the most useful, owing to the fact that oliguria and dropsy are usually the result of circulatory failure. The dropsy, under such circumstances, being of cardiac origin, may be benefited by cardio-vascular stimulants, provided the kidneys are not too badly damaged. Dropsy, of purely renal origin, is not amenable to favourable influence by diuretics. Although the morbid process in the kidneys may furnish us with our primary inspiration to diuretic medication, it is the condition of the heart and circulatory apparatus in most cases that determines the choice of an agent.—*New York Medical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.,

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

EPISTAXIS.

Treatment—All that is necessary in epistaxis is to fashion, with a pair of scissors, a dry plug of prepared sponge, in size and length comparable with the little finger of a twelve-year-old boy. This should be carefully soaked in boiled water, to free it from grit, squeezed dry, to free it from unnecessary fluid, and inserted its full length gently along the floor of the bleeding nostril. No styptic is necessary. The expansive pressure of the soft sponge against the bleeding side, increased by the coagulation of a few drops of blood in its interstices, will check the bleeding at once. It should be removed in twelve hours ; under no circumstances should it remain longer than twenty-four hours.—*Sajow's Cyclo*.

ANAL FISSURE.

Fissure of the anus and rectum is frequently caused by constipation, and hence it is always a good plan to regulate the bowels, and relieve the congestion of the portal veins. For this purpose we may give :

R̄ Sodii Salicylatis.....	2 drachms
Tinct. Nucis Vom.....	4 drachms
Ext. Alterans fl.....	2½ ounces

M. Sig.: One teaspoonful before meals in water.

Apply locally a solution of nitrate of silver, ten grains to the ounce, every second day, or hydrate of chloral if the fissure is covered with pale, flabby granulations. The latter may be used in a solution of twenty grains to the ounce, and applied twice daily on absorbent cotton. If these measures fail to stimulate the growth of healthy granulations, and especially if the edges are hard and thickened, pure tincture of iodine may be cautiously applied once in three days. This treatment will seldom fail if used persistently for from four to eight weeks. If there is much pain after defecation a little cocaine will give temporary relief.—*N. Y. Med. Jour.*

APPENDICITIS AND LIFE INSURANCE.

J. Weill-Manton, Paris, discussing the matter of granting insurance, lays down these rules :

1. Any abnormal sensitiveness in the appendicular region justifies postponement.

2. Applicants are admissible when cured by operation, a few weeks after interval operations; after three or four months when the resection has been done during an attack; in eighteen months or two years when the applicant has been cured by the simple opening of a purulent collection about the appendix. It will always be best to require a statement from the operator or from a physician present at the operation, giving the precise nature and the results of the intervention. The same conditions will hold in cases of circumscribed peritonitis with spontaneous evacuation of the purulent collection.

3. Any typhlitis, appendicitis, appendicular colic or crisis, however slight, acknowledged by the applicant or suspected by the examiner, will subject to a postponement of two or three years.

4. Two or more attacks will require a more lengthy postponement which will be proportionately increased according to the number and severity of the attacks.

5. The research of family antecedents will be considered as an important element of greatest moment in the younger applicants.

6. In cases of remote antecedent attacks of appendicitis, the examiner must carefully investigate the existence of signs which might reveal the slightest awakening of the old appendicitis.

7. Every case of chronic and of recurring appendicitis must be rejected.—*Med. Examiner.*

TYPES OF ENTRANCE AND EXIT WOUNDS AS SEEN IN THE SOUTH AFRICAN CAMPAIGN.

C. S. Wallace : Typical Wounds caused by Normal Small-Bore Bullets.—A perfect, underformed, small-bore bullet entering at right angles to the surface makes, as a rule, a round hole slightly smaller than the bullet itself. Around this aperture is a narrow ring about one-sixth of an inch in breadth, from which the cuticle has been removed, and which appears some hours after the receipt of the injury as a red border to the wound. A little later, this ring, as well as the actual hole, is covered with a dark scab, which consequently is larger than the hole which it covers. The bullet in its passage inwards pushes in front of it the skin, which is thus brought into contact with the sides of the bullet and bruised by it. The projectile, then passing on, stretches and perforates the skin, and gains admission through a hole which is smaller than the actual diameter of the bullet.

Typical Wounds Caused by Normal Small-Bore Bullets.—When the axis of flight of the bullet is inclined at less than a right angle to the surface, the wound in the skin becomes oval, and the breach of surface, therefore, is slightly bigger. When the angle is very oblique the bullet traverses a certain track of skin, depressing it more and more until actual perforation takes place. The skin, therefore, is bruised and the cuticle destroyed for some distance from the aperture of entrance. This damaged area of skin shows as a red raw place when the wound is recent. The shape of the contused area is roughly that of an isosceles triangle with a rounded apex, and the sides are slightly bent outwards. The base is formed by the perforation in the skin. The breadth is often more than that of the actual bullet. Bullets passing out through the skin obliquely make an oval aperture of exit, and this, if the line of flight is greatly inclined to the skin, is

often of large size, but still remains oval. The skin is evidently pushed out and then burst. The width of such a wound is rather striking, and is due to the skin being unsupported and to the natural elasticity of the cutis causing retraction and gaping.

Ricochet Bullet Wounds.—In these cases the wounds lose more or less of their typical character according to the amount and kind of distortion the bullet has undergone. The round, oval or slit-like wound becomes irregular, torn or jagged, for, even if not greatly distorted after striking the ground, the bullet no longer continues to have its long axis in the axis of flight, and so may strike the body with its side, or partly with its side and base. In such cases the length of the wound will vary according to the actual position of the projectile at the moment of its impinging on the skin. Fragments of stones struck by bullets will also cause jagged irregular wounds. This is especially the case when the bullet strikes the body where it is in contact with the ground.

The So-called Explosive Bullet Wounds.—These are nearly always met with in connection with fractures of bone. The extent of the exit wound has no invariable definite relation to the underlying damage, although it may afford valuable indications thereof. The introduction of a finger will often show that although the exit aperture may be large, the skin is so undermined and the muscles so torn that a still larger irregular cavity is formed into which the ends of the fractured bone protrude, and this is especially well shown in cases of fractured femur. Another form of wound is that in which the skin is blown away to a great extent. This is likely to happen if the bullet emerges from a subcutaneous bone, as the shin, and then there is a definite loss of substance so that a crater-like wound results. A third form is that in which the muscles and tendons are torn, and at the same time extruded through the skin wound and form a protruding mass above the level of the skin resembling in some degree a fungating sarcoma, especially if seen for the first time some days after the infliction of the wound.—*Brit. Med. Jour.*

ABORTING BUBOES.

Dr. Christian, in a recent article in the *Therapeutic Gazette*, declares, after quite an extensive experience in the Philadelphia *Polyklinik*, that he believes that fully fifty per cent. of buboes, due to gonorrhœa, chancroid, or herpes, can be aborted if proper treatment is undertaken before pus has begun to form. He thinks that the matter of aborting

buboes has not received the attention it deserves in modern works on surgery. His plan is to prepare the following ointment: R Ung. Hydrargyri, Ung. Belladonnae, Ichthyol, Lanolin, each eight parts. A piece of surgical lint spread with the ointment is applied directly to the swollen gland, and over this is placed a piece of oiled silk of the same size. The next essential is to insure constant pressure over the gland, and this is accomplished by placing a large pad of cotton over the oiled silk. Last, a wide spica-of-the-groin is next applied, two bandages being employed. This treatment is renewed every second day, and at the end of two weeks the swelling has usually disappeared. Out of twenty cases of buboes, treated by this plan, twelve were cured. Of course, if the bubo is due to tuberculous infection, this treatment will be of no use.—*Four. Medicine and Science.*

IMMEDIATE AND REMOTE EFFECTS OF BRAIN INJURY.

D. S. Fairchild, Clinton, Iowa, concludes from his study of a series of cases that :

1. Violence of no great intensity when applied to a limited area of skull may cause a fracture with only momentary displacement with a rupture of a meningeal artery, or a rupture of an artery without fracture.

2. A localizing injury, which may lead to a fracture without displacement and hemorrhage, does not as a rule, cause a serious permanent brain lesion if early and judicious treatment is employed.

3. A fracture may occur without apparent displacement, yet a real localized pressure on the brain exists which may cause irritative changes involving a more or less extended sclerosis and remote secondary results, as epilepsy or mental impairment.

4. A blow may be received on the head which may produce a more or less extensive laceration of the scalp which in itself is not serious. But the fall from a height or from a rapidly moving train may produce more or less extensive contusion or laceration of brain tissue leading to serious immediate or remote effects.

5. A fall from a height or moving train may, without a fracture, cause directly or indirectly a contusion or laceration of brain tissue or so disturb the cerebro-spinal fluid as to primarily bring about such changes and cause immediate results or secondary serious remote effects by inducing degeneration and final interstitial changes producing insanity.

6. An injury may be of such a character as to produce a localized wound of the brain that may heal with the pro-

duction of scar tissue which may extend, may or may not undergo cystoid or other degeneration with serious remote effects.

7. In the absence of localizing or other definite symptoms, to indicate the nature of the lesion, the character of the accident and the manner in which the force is applied is of great value in reaching a conclusion as to the probable nature of injury to the brain—*Jour. A. M. A.*

THE TREATMENT OF TRAUMATIC INFLAMMATIONS OF THE JOINTS.

A time-honoured procedure in the management of the traumatic synovitis, is to place the joint at rest. Strict immobilization, with the use of hot fomentations, is the accepted method of treatment. As soon as the pain subsides the patient is commonly allowed to get about; if there is much fluid in the joint it is slowly absorbed away, and there is usually more or less thickening of the peri-articular structures with the formation of bands of adhesion in the joint, seriously interfering with its motion. A joint in the condition here described is subject to subacute exacerbation, brought on by slight strains or twists, which would be absolutely unnoticed in a healthy joint, and which are accompanied by an increase in the fluid and some exaggeration in pain. These subside with rest, and the patient again gets about, to have the process repeated in endless succession. Stimulating linaments, anti-rheumatics and other applications are employed in vain, until in sheer desperation the physician puts the patient to bed and again immobilizes the joint for a period of two or three weeks. This is followed by improvement, but later on with the inevitable relapse. In young persons, and those whose circulation is good, as time passes and there is a vigorous effort to resume the use of the limb, there is greater improvement, followed by ultimate recovery. That this is due more to the persistence of the patient and a determined effort to use the limb, rather than under the advice and treatment of the physician, is apparent to one who carefully studies the history of one of these cases. The error in the treatment of a joint by rest has, we think, come about in two ways: First, the improvement and cure which sometimes results in tubercular and other infected joints by rest, and the improvement which is noted in traumatic non-infected joints by brief period of rest. This latter has undoubtedly led physicians to employ rest, thinking that, if a joint was improved by a few days' rest, that it would only be necessary to continue long enough to have a perfect cure. The later theories regarding the treatment of such

joints tend toward just the opposite treatment. The first few days after a joint injury rest may be employed with advantage, but very soon it is important to place the joint in active use, even though it is painful and there is considerable fluid remaining in the joint cavity. This is to prevent adhesions. If the adhesions have already formed it is absolutely necessary that they be broken up and full motion must be given to the joint, otherwise the recurrent inflammations and accumulations of fluid will inevitably take place. Instead of rest, therefore, the latest treatment of traumatic injuries to joints includes a thorough and deep massage, which should be so vigorous as to stimulate the synovial membrane to absorption, and of passive motion which should include the whole range of joint movement. In this way joint adhesions are avoided, or if already formed are broken up and stretched. Joints treated in this way show a much higher percentage of recoveries and much less danger of secondary inflammation than those treated by rest, in which the peri-articular surfaces become edematous, the synovia eroded, together with the destruction of tissue which results from long chronic inflammation. A quick cure is essential to a permanent one in these cases. —*St. Louis Med. Rev.*

THE TREATMENT OF THROMBOSED VARICOSE VEINS OF THE LEG.

C. Mansell Moulin discusses in the *Clinical Journal* of July 31, 1901, the treatment of thrombosis of superficial varicose veins. This condition is especially frequent in that part of the internal saphena at the side of the knee and in the lower third of the thigh. The condition is a grave one because of the liability of a portion of the thrombus separating and reaching the heart. The diagnosis of this condition is easy; the soft purplish masses along the course of the veins, standing out underneath the skin and more or less adherent to it, cannot be mistaken. There is always inflammation around a thrombosed vein, and secondarily a certain amount of tenderness and redness of the skin and swelling of the surrounding cellular tissue. It is advisable before coming to a decision as to the method of procedure to carefully note how this superficial inflammation spreads. Now and again the inflammation of the cellular tissue involves the walls of the vein, and a phlebitis is secondary to the infective inflammation of the surrounding tissues. These cases must be carefully distinguished from those in which the primary trouble is a thrombosis and the inflammation to it secondary and comparatively slight.

The causes which give rise to thrombosis in veins vary in individual cases. In most cases the thrombosis starts from a dilatation in which presumably the blood is almost stagnant, or from behind a valve. Impaired vitality of the endothelial lining of the vein is another cause. Sometimes this may arise from prolonged stasis, the nutrition of the lining cells growing more and more feeble until at last some fibrin ferment is set free. More frequently the cause is traumatic—a blow or the compression of a bandage. The third cause of thrombosis, more difficult to estimate, is the difference in the constitution of the blood. In a recent case on which the writer operated the thrombus extended from below the knee to the saphenous opening, a condition which could not have arisen from a local cause. What this alteration in the constitution of the blood may be it is not easy to say. It occurs in such wasting diseases as phthisis, and is not infrequent in typhoid. It sometimes occurs after severe surgical operations which pursue a perfectly aseptic course. After severe abdominal operations it is well to raise the foot of the bed from nine to twelve inches to prevent venous stasis in the lower extremities. It is possible that these cases may be of bacterial origin, the germs having been taken in during operation, but not being sufficiently numerous to cause a general reaction in the system, but only a disturbance in the blood which is nearly stagnant. Such a condition has been experimentally proved in animals.

The routine treatment of thrombosed veins is to enforce absolute quiet of the affected limb, covering it with lead lotion or extract of belladonna, and wait until all pain and tenderness have gone, and the vein has either regained its natural condition or feels hard and cord-like. In the meanwhile the patient is liable to sudden embolism, which may occur at any moment, and to extension of the thrombus until it has spread through the saphenous opening into the femoral vein, or, what is nearly as serious, until it extends through some of the communicating branches into the deep veins. Such prolonged treatment is unsatisfactory, as it may take weeks or even months for a blood-clot to become organized and obliterate the vein. Surgical treatment should be undertaken early. All that is necessary is to make an incision down upon the vein, turn out the thrombus, and ligate it above and below. In most cases it is wise to put a ligature around the vein immediately below the saphenous opening, to prevent the clot, if it is accidentally displaced during the operation, being carried into the general circulation. Where the thrombus

is so long that it cannot be removed entire, segments should be taken away and the divided ends of the vein closed by ligature, or better still by torsion. In some cases where there is a large mass on the inner side of the thigh and the wall of the vein is more or less adherent to the surrounding structures, a flap of skin is removed and the mass of veins slit in every direction. The clot is turned out, and so much of the wall as can be readily removed is taken away, the skin afterward being replaced.

In cases involving the superficial veins nothing better than these methods of operating can be employed. The redness of the skin, tenderness, and all other signs of inflammation disappear at once, and union takes place within a week. In a fortnight the patient is up and about. Unfortunately, in thrombosis of the deep vessels, operation is out of the question; nothing but unlimited time and patience are of service.—*Medicine.*

A STUDY OF BURNS.

Frederick Griffith, in the *Medical News* of August 24, 1901, says that burns, which are the commonest of all injuries, should be treated upon accepted surgical principles. They may be divided into two classes: the first, which involves the skin only, and a second group including the deeper structures. Early death and internal complications after burns are due to the direct action of the heat, causing fragmentation and vital changes in the blood-corpuscles. The constitutional disturbance is probably due to infection originating in the burned area. Contraction in burns and subsequent deformity is determined by the granulations. The greater the friction, from whatever source, the more extensive the granulations, followed by a larger amount of connective tissue, and hence greater contraction. The early methods of treating burns had for their basis the prevention of irritation and the excessive formation of connective tissue.

In the early treatment of a burn all dead and charred tissue should be removed as far as possible. The thoroughness with which this is done determines, in great measure, the amount of discharge and the probable presence of infecting organisms. The best antiseptic for immediate application is hydrogen dioxide. After the wound is cleansed, rubber tissue should be placed over it to prevent contact with absorbent dressings. Splints should be employed to secure relaxation and retention in obtaining rest for the burned part. This is quite as important as it is in fractures. The internal treatment of burns should be by

stimulation until reaction from shock has taken place, when the treatment should be supportive.

Otto L. Muench (*ibid.*) recommends carbolic acid in the treatment of burns. He has employed it in several cases, in one of which the amount of surface involved was considerable. The application of pure carbolic acid is followed by an immediate cessation of pain and a prompt and rapid healing of the part. The carbolic acid is applied, using the ordinary 95 per cent., and is immediately washed away with alcohol. Not only does it give instant relief from pain, but it effectually antiseptizes the surface of the burn and seals all the avenues of infection.

Therapeutic Notes.

BED SORES.—If the nurse is competent, this painful complication will rarely require treatment. It is advisable to rub the parts upon which the patient rests with alcohol, and daily sponging of the entire body with warm water and then with alcohol will add greatly to comfort. Should a suspicious spot of redness present itself, remove the pressure therefrom by an air-cushion, and prevent the folds of linen pressing upon the patient. Dry dressings are preferable to moist ones for bed-sores, and oxide of zinc in powder or ointment is one of the most valuable remedies; acetate of aluminum has also a very beneficial effect. At times, considerable loss of substance is found, giving rise to a very foul odor; in these cases a charcoal poultice acts remarkably well.—*Rotch.*

CHLOROFORM is now very seldom used in the Dublin hospitals. The patient is first put under the influence of nitrous oxide, and when anæsthesia is secured it is prolonged by means of ether.

Dr. Mundé recommends vaginal injections of bromide of potash, 1 dr. to a pint of water, in cases of so-called irritable uterus, diffuse pelvic pains and hysterical neurosis in various parts of the body.

In the Philippines the insurgents dress wounds with dry salt or strong brine, for lack of the usual antiseptics, and wounds from firearms heal under it in four or five days.

PEANUTS have the faculty of absorbing alcohol and preventing it from demoralizing the nerves and upsetting the thinking machine, without entirely curtailing its exhilarating effects. The large proportion of oil in the peanuts accounts for the result. A good wineglass of olive oil has the same effect.

The passage of the catheter in urinary diseases is a surgical operation, and should be considered as such. It is not merely a manœuvre, rashly and indiscriminately to be undertaken.

IN BILIARY LITHIASIS, Dr. Stanley M. Ward finds that if the patient will eschew fats and take 1 dr. of phosphate of soda in hot water three times daily for six months, then twice for three months, and then continue the dose before breakfast for the balance of the year, recurrence is very rare.

The injection of a glass syringeful of lemon juice into the nose, after it has been cleansed of clots, will stop bleeding after everything else has failed.—*Massachusetts Medical Journal*, September, 1901.

IN INCONTINENCE OF URINE in children, antipyrine has proved to be useful in large doses. Take 2 dr. of antipyrine and dissolve it in 1 oz. of water and add 1 oz. of alcohol. Take one teaspoonful at bedtime.

Balsam of copaiba is an excellent remedy for chilblains; paint it on once a day or more.

The following is Vidal's formula for seborrhœa sicca of the scalp: Precipitated sulphur, fifteen parts; castor oil, fifty parts; cocoa butter, twelve parts; balsam of Peru, two parts. Thoroughly mix the sulphur and castor oil, add the cocoa butter with the aid of a gentle heat, and finally the balsam. Rub into the scalp.

AGARICIN in doses of $\frac{1}{8}$ to $\frac{1}{4}$ gr. is a valuable remedy in the night-sweats of phthisis.

A thin paste made by mixing iodoform in balsam of Peru is an excellent application to chronic indolent ulcers. Over this, place a dressing of bichloride-of-mercury gauze.

Dr. Sidlo, long ago, claimed to have cured many cases of ozæna by daily washing out the nasal cavities with a 2 per cent. solution of chloride of potassium, to which 10 per cent. of glycerine has been added. This is followed by inserting rolls of cotton soaked in a mixture of one part of glycerine and three parts of water, the tampons to remain in place for one hour.

PHOSPHORUS in full doses is said to be very beneficial in the treatment of some cases of goitre.

A lotion made of 1 dr. of permanganate of potassium to one pint of water is very effective in counteracting the odor of sweating feet.

Chapman calls attention to a diagnostic sign in myxœdema which has often proved useful. As is well known, puffiness of the eyelids is a sign of Bright's disease. So, too, is it a symptom of myxœdema due to the collection of mucin. So that when the urine is normal and puffiness of the lid is a symptom, the possibility of myxœdema being the cause should be kept in mind.

Dr. Ry reports thirty-two cases of night-terrors in children, in all of which adenoids were present in the naso-pharyngeal vault, and when these were removed, the nightmare ceased. He, therefore, concluded that adenoids are a common underlying cause of this trouble.

IN ACUTE GONORRHEAL EPIDIDYMITIS, Setz has great faith in guaiacol. He first washes the parts with soap and ether, and then applies a 10 per cent. ointment of guaiacol in vaseline.

Many physicians prefer the bromide of strontium to any other form of bromide in the treatment of epilepsy, because it can be continued for months without any of the deleterious effects which attend the use of the potassium salt, and can therefore safely be given in doses large enough to control the fits.

LIME IN THE EYE.—Wash the eye thoroughly with a large quantity of warm water—for a little water but adds to the trouble by slacking the lime—and then introduce a solution of sugar and water. This is superior to solutions of vinegar or dilute acids, because sugar forms an insoluble compound with lime.

Whatever else you do in internal carbolic-acid poisoning, give at once a large dose of alcohol—whisky, brandy, rum, or gin will answer—and repeat it often.

THE TREATMENT OF OZÆNA with antidiphtheritic serum seems to have many prominent advocates. Such specialists as Mgyind, Cathetin, Kyle and King report good results following this plan.

THE TREATMENT OF PNEUMONIA by serum therapy has not been attended with sufficiently marked results except to give encouragement for its further trial.

Strychnine is the drug most commonly used to sustain the heart, and many advise that it be given in full doses hypodermically because the stomach is often so disturbed as to delay its absorption.—*Journal of Medicine and Science*, August, 1901.

FISSURE OF THE NIPPLE has been very successfully treated by many physicians with orthoform. A few drops of a saturated solution of orthoform in 80 per cent. alcohol is applied directly to the crack, and a dry compress is then placed above.

SULHUR CREAM FOR DANDRUFF.

Dr. Geo. T. Jackson says the following will make an elegant sulphur ointment, which he uses extensively in the treatment of dandruff:—

R White wax.....	3 iiss.
Ol. petrolati.....	3 iiss.
Rose water.....	3 j.
Sod. baborate.....	gr. xv.
Precipitated sulphur.....	3 iiss.

This is an elegant, smooth, white preparation without sulphur odour. It keeps perfectly, does not separate, and is as perfect an ointment as can be. Dr. Jackson has tried on his scalp all sorts of lotions in the treatment of seborrheal dermatitis, and invariably comes back to the sulphur cream with pleasure and profit. Used once or twice a week, it keeps the scalp comfortable, does not make the hair too greasy, when properly applied, and checks the dandruff.—*Four. Cut. and Gen. Ur. Dis.*

FOR TOOTHACHE.

Under the name of Swedish toothache drops, the Ohio Dental Journal quotes the following:—

R Clove-oil.	
Cajuput-oil, of each,	10 parts.
Chloroform.	
Acetic ether, of each,	5 parts.
Menthol,	3 parts.
Camphor,	1 part.

Dissolve. For application to the tooth.—(*New York Medical Journal.*)

THE CLEANSING OF TEETH.

M. H. Fletcher, M. D., D. D. S. (Cincinnati *Lancet-Clinic*), gives as the result of elaborate investigations, the following formula :—

R Pulv. cereal, 75 per cent.
Sodium borate, 18 per cent.
Potass. chlorate, 7 per cent.

Orris and menthol to flavour, and saccharine to sweeten to taste.

Dr. Fletcher says that it requires at least five grains at a time of any powder to be at all efficient in cleansing the mouth and teeth, and double or triple the portion is better ; in every five grains of the above formula there is one and one-quarter grains of the combined remedies ; this is sufficient to keep the saliva decidedly alkaline for some time after using and to counteract the ill effects of sweets.

CAFFEINE IN THE TREATMENT OF WHOOPING-COUGH.

The Agenda-Médical gives the following formula :—

R Caffeine valerianate, 3 parts.
Brandy, 40 parts.
Syrup of coffee, 500 parts.

M. From a coffeespoonful to a tablespoonful, according to the patient's age, is to be given morning and evening.
—(*New York, Medical Journal*.)

VENEREAL SORES.

R Hydrgr. Chloridum Mite..... 1 drachm.
Listerine..... 1 ounce.
Aqua Calcis..... 5 ounces.

M. Sig. :—Mop the surface night and morning with gauze or absorbent cotton.

Jottings.

BUTTERMILK.

Buttermilk as a remedial agent can not be praised too highly. The lactic acid, the sour of the buttermilk, attacks and dissolves every sort of earthy deposit in the blood vessels. Thus it keeps the veins and arteries so supple and free running there can be no clogging up ; hence no deposit of

irritating calcareous matter around the joints, nor of poisonous waste in the muscles. It is the stiffening and harrowing of the blood vessels which bring on senile decay. Buttermilk is likely to postpone it ten to twenty years, if freely drunk. A quart a day should be the minimum, the maximum according to taste and opportunity. Inasmuch as gouty difficulties usually arise from sluggish excretion, buttermilk is a blessing to all gouty subjects. It gently stimulates all the excretories—liver, skin and kidneys. It also tones the stomach and furnishes it the material from which to make rich, red, healthy blood. If troubled with gout avoid meat, sweets, pastry, wines, spices, hot rolls, bread of all sorts, and everything belonging to the tribe of ferments. Eggs, game, fresh fruit, vegetables, especially salads, may be eaten with impunity. If any one has a creaky joint or a swollen and aching one, he should drink all the buttermilk, he can relish whenever and wherever he can, but it should be fresh churned and wholesome.—*Health Culture*.

TO CURE INSOMNIA.

A very simple method of inducing sleep in cases of persistent insomnia, and one that has succeeded where many drugs have failed, is: Simply administer a moderate amount of liquid food before the patient goes to bed. This diverts the blood from the brain to the abdominal organs, and takes away the cerebral excitement that precludes sleep.—*New York Med. Jour.*

MISTAKEN NOURISHMENT.

No patient with chronic Bright's disease should use beef tea or bouillon, or the so-called beef extracts, as a diet. Over and over again it has been shown that these substances are concentrated solutions of the very salts which go to make up the solids of the urine itself, in addition to a certain amount of albumin. Yet I am constantly consulted in cases where the physician is nourishing his patients on such food with the impression that he is doing a good thing, whereas he is either overworking the kidneys or overcharging the blood with toxic substances, or both. Whenever there is an aggravation of symptoms a recourse must be had to a milk diet. Diluted milk is to be preferred to skim milk, because in the latter the proportion of proteid remains unchanged, and the fat, harmless fat, is removed, while in dilute milk the proteid is reduced and much of the fat is retained, as is, of course, desirable.—*Med. Standard*.

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Editorial.

IMPURE WATER.

Chemists and bacteriologists attached to the health departments of civic corporations occasionally give us considerable food for thought. Whether that thought produces the effect which those gentlemen think some of their statements will have is, however, open to serious question. Attached to the corporation of the City of Montreal is a chemist of no mean ability and whose chemical knowledge no one would question. Whether he understands human nature quite as well is, in our opinion, exceedingly doubtful. Within the last few months we have had from him reports on the water supply of Montreal which he asserts is chemically and bacteriologically a healthy water to drink. He, however, admits that it is occasionally off color and of a somewhat brownish hue, still will not occasion any untoward results. We believe he is perfectly correct in this statement. As we draw our supply from the Ottawa river, which at best is in bulk of a brownish hue, it requires but a small increase in the amount coming from swamp land to

make this color very decided. We find it so in the spring nearly always. Now, if there is any drink which a human being craves it is water, and he desires it clear and limpid. It is only such water that he relishes. Let us give an example. Pour water into a glass which has contained milk, and at once it becomes whitish blue. That water can never be drank with the same relish as if it had been placed in a clean glass. So often then is our Montreal water discoloured that we, with many others, have not drank a drop of it for a long time. Hundreds have given up its use as an unadulterated beverage, and have supplied themselves with Laurentian water from the Laurentian Springs which is beautifully clear and absolutely free, we believe, from organic matter. While the report of our Montreal water supply is satisfactory, save in the part we have noted, we find that the bacteriologist of the Buffalo Health Department has thrown the citizens of that place, especially those who use filters, into a somewhat excited state. He reports that in water taken from the ordinary tap he found from 160 to 560 bacteria per cubic centimeter, while in the water from a mechanical filter he found from 1,180 to 3,800 per cubic centimeter. The *Philadelphia Medical Journal* commenting on this statement says :

“ ‘This is not surprising ; it is astounding ’ ! The tests clearly show that in many instances filters will clarify the water very nicely, also add tremendously to its bacterial contents. This they do by reason of the filtering material becoming a culture-medium for bacteria, after it has become a little dirty. This is a very serious matter, as it shows that people who trust a mechanical filter to purify their drinking-water are the victims of misplaced confidence. A filter that is not frequently and thoroughly cleansed may become a vastly more dangerous source of infection than the water that it is supposed to purify.”

Really one is almost compelled to exclaim : “ How in the world do we exist with so many bacteria in our food and drink.” It is indeed wonderful.

MEDICAL TEACHING.

The method of teaching Medicine has changed greatly during the last twenty-five years. The work is now more minutely done, and, as a consequence and necessity, there has been a vast increase in the number of teachers. This is a self-evident fact patent to every medical man who has followed the gradual development of the medical schools not only of Canada, but of the United States and Europe. Even as late as fifteen years ago the professorial staff of most medical colleges was filled by men engaged in general practice. Then began the day of commencing specialism, and there was a gradual introduction of specialists on the teaching staff, replacing men who in their day had done their duty and done it well. But the world is ever moving onward, and within a comparatively few years many colleges found that several subjects embraced in the curriculum, especially those of a theoretical character, demanded men whose whole time must be devoted to their work. This demand has been met by, we may say, every teaching medical body, though in the minor schools, that is minor as regards the number of students, it has been a severe strain on their financial resources. To their credit, however, we must say there has not been any holding back, and that all have risen to the situation with an enthusiasm infinitely to their credit. But, with the march of time, other changes will be demanded, and the financial strain will surely become greater. How is this to be met? Endowments have already reached some of our older Canadian schools, and more will doubtless come. The junior schools with increasing age will find friends who, recognizing the good work they are doing, will come to their aid.

But we ask, has the country not a duty to perform, of placing in the hands of our medical teaching bodies an annual grant which would be but a slight recognition of the enormous work gratuitously performed by the medical profession? No other profession performs gratuitous work to anything approaching that of the profession of medicine. This work the government should recognize in the way we

have suggested. This, we presume, was the view taken by the government of this province when it for years gave the medical schools an annual grant somewhere in the neighbourhood of one thousand dollars. When the finances of the province were reduced to a low ebb this annual grant was cut off, but, now with an income showing a small surplus, it is worth while to raise the question whether it would not be wise policy to again give small grants to the various medical schools in the Province of Quebec. We have said that great changes have taken place in teaching medicine during the last two decades, but there are not a few who feel that some of the changes are of a questionable character. The amount of time devoted to laboratory work is considered by some to be too great, while practical medicine, surgery and midwifery, to learn to practice which students go to college, do not receive that attention which it is essential they should. Mere individual attention seems to be a direction toward which the thought of many is turning. Harvard, one of the leading medical schools, would seem to believe in it, for they have one hundred and thirty-one teachers, or one to every five students. Teaching by small sections instead of class teaching is thus made practicable. The Medical Alumni Association of that school has, through a committee, been investigating its method of teaching medicine, and the report was presented at a meeting held in June last. It strongly endorses this method of individual teaching and urges its extension, and, of necessity, a large increase in the staff of instructors. It also declares that visits to the hospitals of thirty or more students fail in their object. That such visits should cease and make way for smaller numbers in sections where the student should take an active part in the visits and be questioned. This has already been done, so far as Fourth Year men are concerned, who are divided into sections of five who make eighteen visits in the wards, when the after-treatment of operations and the routine care of the patients is illustrated and discussed with the students by the assistant surgeons. One might imagine that a number of such visits daily would

interfere with the recovery of patients, but we are assured by a graduate nurse of one of the largest Boston hospitals that such is not the case, only about three hours, and that in the morning, is occupied by these visits. Such modes of condensed and individual teaching are applied in clinical medicine and in obstetrics with some necessary variation in detail. Both the great Boston City Hospital, the Dispensary and Lying-in Hospital and its out-patient relief service are employed in this work. Students have each a fracture, a minor surgical case, a medical case, six cases of labour to treat themselves and to report on, but always near a consultant if unexpected emergencies arise. The opinion of men experienced in teaching is that didactic lectures should be less frequent, but never abandoned. The proportion suggested is to clinical and laboratory teaching of one to three or even one to four in some subjects. This is especially important in gynæcology, threapeutics, laryngology, ophthalmology and dermatology. It is especially important in the last two where our knowledge is based on what we see and feel. Specialties should be relegated to the Fourth Year, and should be almost entirely taught by clinics. The touch, the sight, the use of instruments of precision, absolute contact with a case should be the means of examination. In the case of operative surgery there should be didactic demonstration, a repetition of all operations by the student—no examination paper. The weekly grinds, we think, are very important and ought to be regularly carried out, and the students encouraged to answer. Many we know through either timidity or fear decline, but this difficulty might, we believe, be entirely overcome. It is the only way to secure active mental participation instead of passive receptivity. This Harvard Committee believes that medicine and surgery should be taught together and not as now, disassociated. Nature draws no such line, and we cannot draw any such line in practice. Pathological processes may be first medical and later surgical, or the opposite. It is important that instead of rare diseases forming part of too many clinical lectures that the student should be made familiar with com-

mon maladies such as are likely to make up the bulk of his practice. The former is of most interest to the teacher, the latter to the student. It is here that the out-door department of our hospitals offer a rich field, and we regret it is not more fully taken advantage of. Many of those who have done so have repeatedly written us stating how constantly in practice they have found the knowledge gained there come to their aid. Teachers we fear do not realize how much of general medicine and how little surgery and specialties form the practice of general practitioners in even fairly sized towns. Seven physicians in general practice in as many such places recently tabulated a year's work and found they had 1,594 cases. Of these 1,230 were medical and 364 surgical and specialties. Of the medical cases two-thirds were of ten common types, such as grippe, digestion, bronchitis, rheumatism, pneumonia, colds, etc. The common we have with us always; on this we must stand or fall in daily practice. It is, therefore, impossible for students to see too much of it. Finally, as regards the examination, these, in our opinion, are often unfair to the student, the oral is too short to give the student a fair chance to show his knowledge, which, extensive as it may be, cannot be universal. The teacher may, unfortunately, light upon the student's weakest point, and, finding that out, should drop it at once, and give him an opportunity of showing what he does know. Hence, many students who have been rejected are eventually our best practitioners, and rise to high professional standing. In the written examination too many questions are often given for the time allowed. The student cannot do himself justice, and he feels it so. Then the labour and exhaustion in reading the papers are too onerous for the examiner. In schools with large classes examination of papers by one man is well-nigh impossible, and many papers are handed over to subordinates. This is not fair, for different men judge from different standpoints, and the students suffer in their marks. It becomes clear, therefore, that as far as possible the standing of students should be the result of work done and its result shown at the time. This

could be arranged for at short intervals throughout each course. It should be the object of the examinations to test the student's power to deal with cases of disease, to make a thorough physical examination, take an intelligent history and reason from these to a rational diagnosis, prognosis and treatment, and this can alone be done by a clinical examination. That he should be able to give a written account of a disease in an examination room, and under examination pressure is of secondary importance. The living case is the one that he ought to examine, diagnose and write a report of. We have been induced to throw together these few lines, based upon personal experience as a teacher for over thirty years and from the opinions gathered from articles published in various medical journals, but more especially from the report of the Alumna Association of Harvard University. This was published lately in the proceedings of that body.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

In the November number of the *Record* we gave the result of the election of the new Board of Governors. We neglected, however, to give the names of those elected by the Universities to represent them on the Board.

They are as follows:—

University of McGill:—Drs. Craik and Lafleur.

Laval University, Quebec:—Drs. Simard and Catellier.

Laval University, Montreal:—Drs. E. P. Lachapelle and Demers.

University of Bishop's College, Montreal:—Drs. F. W. Campbell and J. B. McConnell.

The report of Major Gagaş, Chief Sanitary Officer of Havana, states that for the first time in over a hundred years that city had not a single case of typhoid fever in June, 1901. This is a feather in the cap of our American

cousins, whose occupation of that city has brought about this wonderful result.

The Medical Department of the University of Pennsylvania is the oldest Medical College in the United States. It was organized in 1765, and has graduated 12,201 physicians.

Book Reviews.

The Physician's Visiting List.—(Lindsay & Blakistons) for 1902; fifty-first year of its publication. Philadelphia, P. Blakiston, Son & Co.

In acknowledging the receipt from the publishers of the above Visiting List, we have pleasure in again expressing the opinion, that it stands at the head of all visiting lists.

F. W. C.

The Practice of Obstetrics, by American Authors.

Edited by Charles Jewett, M. D., Professor of Obstetrics and Gynecology in Long Island College Hospital, Brooklyn, New York. New (2d) edition, revised and enlarged. In one handsome octavo volume of 775 pages, with 445 engravings in colors and black, and 35 full page coloured plates. Cloth, net, \$5.00; leather, net, \$6.00; half morocco, net, \$6.50. Lea Brothers & Co., Publishers, Philadelphia and New York, 1901.

That the first edition has been so rapidly exhausted is proof that this work has been appreciated. This edition has been brought thoroughly up to date and much added to it. The teaching is most modern and full of good common sense, the only exception perhaps in the work is the advice given in the management of the birth of the head in simple labour which is undoubtedly bad practice. Personally, I recommend two works on obstetrics to my class in College, one of which is Jewett, and it is perhaps the best one of the two.

H. L. R.

The Pocket Gray, or Anatomist's Vade Mecum.—By the late Edward Cotterell, F.R.C.S. Fifth edition revised and edited by C. H. Fagge, M.B., M.S., Lond., F.R.C.S., Senior Demonstrator of Anatomy Guy's Hospital. William Wood, & Co., New York, 1901.

This excellent little manual on anatomy, now for the first time published in America, is a very welcome contribution to the literature of the science. The term "Pocket Gray" is presumably an

euphemism, as the editor, Mr. Fagge, has evidently studied many other authorities than the late Henry Gray, and like his distinguished father, Dr. Hilton Fagge, of Guy's Hospital, is certainly an accomplished and able anatomist.

The book has the three essential qualities of a scientific work, accuracy, clearness and conciseness, and should be a valuable aid to the student preparing for his final examinations and to the busy practitioner seeking some necessary and desired or desirable details on the subject. This is the purpose of the author and editor, for the work is not designed to compete with the standard works on anatomy.

C. A. H.

The Diagnostics of Internal Medicine. A Clinical Treatise upon the Recognized Principles of Medical Diagnosis. Prepared for the use of Students and Practitioners of Medicine by Glentworth Reeve Butler, A.M., M.D., Chief of the second Medical division, Methodist Episcopal Hospital; attending Physician to the Brooklyn Hospital; Consulting Physician to the Bushwick Central Hospital formerly Associate Physician, Department of Diseases of the Chest and Diseases of Children, St. Mary's Hospital, Brooklyn, New York; Fellow of the New York Academy of Medicine; Member of the Medical Society of the County of Kings, etc. New York: D. Appleton & Co., 1901. Canadian Agents: The Geo. N. Morang Co., Ltd., Toronto.

This work being written from the point of view of a practical clinical work proves most interesting and highly instructive reading; the farther you progress in its perusal the more intensely engrossed do you become. This volume presents some unusual features, and will doubtless find numerous readers who will appreciate the novel method by which the author treats his subject. He divides the work into two parts: first, a study of symptoms and their indications; and, second, a study of diseases and their characteristics. The evidences of disease occupy the greater part of the space and are dealt with in a highly satisfactory manner. In the examination of his patient the embryo physician is instructed by what routine to proceed in order to arrive at a preliminary opinion as to what may be at fault, so that important indications may be later examined in greater detail. The advice herein given by the author and his method of diagnosis deserves the highest commendation, the most minute details being pointed out and their import designated. Dr. Butler has given us an eminently practical book full of what the busy doctor is daily in need of, and dealing at length with symptoms and their diagnostic importance. The general plan of the work, the arrangement of subjects, the coloured plates, the illustrations and diagrams, are alike excellent. The book contains between two covers practically all that is essential for the making of a diagnosis, and apparently no helpful clew in obscure cases has been overlooked. The value of modern

laboratory methods has also been fully appreciated. The volume as a whole is, consequently, a reliable guide for students and practitioners in this important field of medical practice. While every chapter of the book is good, the subject of cerebral localization and of the diagnosis of diseases of the nervous system seems to us to be especially well treated—full, complete and up to date. The publishers have done their part of the work in a highly creditable manner. The book is especially well printed, well bound and artistically illustrated, and we would recommend all in need of a thoroughly practical book and one which will be a valuable addition to their library to purchase a copy without delay.

R. C.

Libertinism and Marriage.—By Dr. Louis Julien (Paris), Surgeon of Saint Lazare Prison ; Laureate of the Institute of the Academy of Medicine, and of the Faculty of Medicine of Paris. Translated by R. B. Douglas. Size of page $5\frac{1}{2}$ by $7\frac{1}{2}$ inches. Pages v-169. Extra cloth, \$1.00 net, delivered. Philadelphia, F. A. Davis Company, publishers, 1914-16 Cherry Street.

This little book deals in a most happy and frank manner with the important subject of libertinism and marriage. Each paragraph shows earnest thought and an extended and intimate knowledge of the subject. One could wish that a copy might find its way into the hands of every physician and student of medicine, for ignorance of the great importance on later married life of the so-considered trivial chronic affections of the urethra is not confined alone to the laity.

In the introduction "professional discretion" is carefully reviewed and ethical conduct strongly upheld, but there is also a strong plea to the effect that the Doctor has not done all his duty by remaining silent, but that he should use his utmost influence to protect the innocent party in case of intending marriage. To insure good health in the contracting parties the suggestion is advanced that a certificate of good health, from a recognized specialist, would greatly facilitate matters. In the succeeding chapters the evolution of Blennorrhoea and its various stages are carefully considered.

In the light shed by our present clinical methods for investigating Blennorrhoea some measure of the responsibility in treating this deceptive disease has dawned upon us.

To the specialist, however, the truth appears in more vivid colours, and the lessons he is enabled to draw from a larger experience cannot fail to impress the thoughtful reader. We take much pleasure in recommending this little work to all labourers in the field of medicine

G. F.

Annual and Analytical Cyclopædia of Practical Medicine. By Charles de M. Sajous, M.D., and one hundred associate editors, assisted by corresponding editors, collaborators and correspondents, illustrated with chromolithographs, engravings and maps. Vol. vi. F. A. Davis Company, publishers, Philadelphia, New York and Chicago, 1901.

As previously intimated, this annual and cyclopædia was to be issued in six volumes at stated intervals, and to represent the progress in all branches of medicine of the last ten years, a monthly journal being sent to each subscriber. This volume is the last of this series, and contains the matter from R. to Z. The articles are very comprehensive and contain the most recent information. That on Typhoid Fever in this volume covers thirty-five pages, and is a fine representation of the treatment of the various subjects. One need not go further than this article to gain a full knowledge of this subject, and this applies to most of the articles. While the work is arranged alphabetically, it is not strictly so; thus, under urinary system we find most of the surgical affections of the kidney, bladder and urethra. In discussing therapeutic articles many agents which are described in regular text-books, but which have become almost obsolete, are omitted, and only those of generally recognized virtue and tried efficacy are considered.

Among the many important articles in this volume are those on Rheumatism, by Dr. Levison, of Copenhagen; Surgery of the Stomach and Intestines, by Prof. W. W. Keen and Dr. M. B. Tinker, of Philadelphia; Surgery of the Spine, by Prof. R. H. Sagre, of New York; Surgery of the Urinary System, by Prof. J. W. White and Dr. A. C. Wood, of Philadelphia; Diseases of the Uterus, by Prof. H. T. Byford, of Chicago; Wounds and Injuries of the Chest, by Prof. L. A. Stimson and Dr. E. L. Kyes, jun., of New York; Typhoid Fever, by Dr. Jas. E. Graham, Toronto.

A very complete general index covering over one hundred pages concludes the volume.

J. B. McC.

The Transactions of the American Electro-Therapeutical Association of 1899-1900, published by F. A. Davis & Co., Philadelphia.

There is no doubt that the different electro-therapeutical agents are taking a larger place than ever in the management of pathological conditions, and justly so. Particularly is this true of the electro and X-ray methods.

In fact, we have now arrived at that stage where certain classes of disease can only be successfully managed in this way, and

it will be necessary for the modern physician to equip himself accordingly if he wishes to keep pace in the march of scientific therapeutical progress.

As the workers in this field hitherto have been comparatively few, we therefore look upon the results of their experience with no small amount of interest.

Every year shows distinct steps in advance, not only in the variety of conditions treated, but also in the manner of dealing with them. The transactions in the numerous topics referred to and the attendant discussions offer many suggestions of interest and worthy of the careful consideration of the electro-therapeutic student. The treatment of such affections as rheumatism, sciatica, neurasthenia, hysteria, hypertrophied prostate, certain forms of cancer, etc., have always baffled the medical practitioner, and it is to this class of conditions particularly that electricity in its newer methods of application is peculiarly adapted, bringing certainly more or less relief if not absolute cure.

The Transactions are well worthy of perusal, and we look forward with interest to similar publications in the future.

W. E. D.

A Text Book of Physiological Chemistry. For Students of Medicine and Physicians, by Charles E. Simon, M.D., of Baltimore, author of "Simon's Clinical Diagnosis." In one octavo volume of 452 pages. Cloth \$3.25 net. Lea Brothers & Co., Philadelphia and New York.

This work, from the pen of Dr. Simon, is the first systematic text-book of Physiological Chemistry that has appeared in the United States. The production of such a work was desirable in view of the rapid strides made, of late years, in that department of science.

The arrangement of the subject-matter of the work impresses us favourably. Its first section treats of the origin and chemical nature of food-substances, and of the products of their decomposition. The recent advances in our knowledge of the chemistry of the carbohydrates and of the nitrogenous derivatives of the albumins are here clearly presented. The second section deals with the processes of digestion, resorption and excretion. The various digestive fluids concerned in the transformation of food-stuffs into material which can be utilized for the needs of the tissues, their action on food substances and the resorption of the final products of digestion are considered in detail.

This section is written with a thorough knowledge of the requirements of students in this department of physiological chemistry. Only the more important tests are given, and the methods of quantitative estimations are clearly and accurately described. Exception might be taken to the statement that organic acids in concentrations met with in stomach contents do not

strike a pink colour with dimethyl-amido-azobenzol. This reagent, introduced by Töpfer for the detection of free hydrochloric acid, reacts with lactic acid in a concentration of 1 in 1,500, and this acid sometimes occurs in stomach contents in the above proportion. Would it not be advisable to extract all organic acids likely to occur in stomach contents with ether before applying Töpfer's test for free hydrochloric acid?

The third section of the work is devoted to the chemical study of the tissues and organs of the body and to the products of their action.

Dr. Simon's work is well adapted to the needs of students, and we commend it as a thoroughly practical guide to workers in the Physiological Laboratory.

A. B.

International Clinics.—A quarterly of clinical lectures and especially prepared articles on all branches of Med and Surgery and other topics of interest to students and practitioners. By leading members of the Medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U.S.A., with the collaboration of John B. Murphy, M.D., Chicago; Alex. D. Blackader, M.D., Montreal; H. C. Wood, M.D., Philadelphia; T. M. Rotch, M.D., Boston; E. Landort, M.D., Paris; Thos. G. Merton, M.D., of Philadelphia, and Chas. H. Reed, M.D.; J. B. Ballantyne, M.D., of Edinburgh; and John Harold, M.D., of London; with regular correspondents in Montreal, London, Paris, Leipzig and Vienna; volume ii; eleventh series. J. B. Lippincott & Co., Philadelphia, 1901. Canadian Agent: Charles Roberts, 1524 Ontario Street, Montreal.

The present number of this popular quarterly of clinical lectures is one of exceptional interest, owing to the number of excellent articles it contains, the eminence of many of the contributors and the timeliness of most of the articles. Readers of this periodical are kept in touch with the real progress in medical science. The clinical lectures and prepared articles represent mostly the experience and accumulation of knowledge of teachers connected with colleges and large hospitals, and, being presented in the clinical rather than text-book style of article, is at once attractive to the reader, as well as being laden with the present views and representing the experience and practical suggestions of ripe thought and observation. There are twenty-eight articles in this number, all of them being of more than ordinary interest. Among the more important are the following:—Surgical Analgesis by Injection of Cocaine into the Spinal Column, by T. A. Taffin, Paris; The Oxytocic Effect of Lumbar Injection of Cocaine, particularly to induce Labour, by A. Doleris, M.D., Paris; The Treatment of Puerperal Eclampsia, by Saline Diuretic Infusion based on Twenty-Two Cases, Robert Jardine, M.D. Edin.; The Treatment of Malignant

Tumours by an Anticellular Serum, Dr. Wlaeff, of Petersburg; Smallpox, with Particular Reference to the Prevailing Epidemic, Jaq. T. Schamberg, M.D., Philadelphia—this article is well illustrated; Actinomycosis of the Respiratory Tract, by Ludvig Hektoen, M.D., Chicago; The Diagnosis and Prognosis of Some Forms of Blood Disease in Infancy, by J. S. Fowler, M.D., F.R.C.P., Edin.; Abortions, by J. W. Ballantyne, M.D., F.R.C.P.E., F.D., Edin., also article by A. Blackader, M.D., Montreal. J. B. McC.

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the Medical and Surgical sciences. Edited by Hobart Amory Hare, M.D., Prof. of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, assisted by H. R. M. Landis, M. D., Assistant Physician to the out-patient Medical Department of the Jefferson Medical College Hospital. Volume IV., December, 1901. Lea Brothers & Co., Philadelphia and New York, 1901.

This volume is out on time and keeps up its reputation as a first-class digest of the best medical and surgical literature of the preceding three months. Where so many subjects are embraced it is impossible to allude to them in detail. Still we cannot but draw attention to the article on Anæsthetics by Dr. Bloodgood, which occupies fifty pages of the book. It is a complete review of all that is known on this most important question, and it ought to be read and digested by every operating surgeon. Ether and chloroform, of course, remain the drugs of choice in the vast majority of instances in which a general anæsthetic *must* be given. Nevertheless, other general anæsthetics have entered the field in competition and are rapidly finding their proper place, such as nitrous oxide, in combination with oxygen, ethyl-chloride and ethyl-bromide. All the anæsthetics are discussed, and the conclusion drawn is that it is unjustifiable for any surgeon to use any one anæsthetic exclusively. Stomach surgery has several important items, and though they do not occupy much space, yet operating surgeons will read them with satisfaction—for the indications for operating are definitely laid down by men who, from experience and success, have a right to speak with no uncertain sound. In Dr. Belfield's section on genito-urinary diseases, the subject of general infection by the gonococcus is fully discussed, and tuberculosis of the genito-urinary tract receives the attention which its importance demands.

The various pathological conditions of the kidneys are ably treated by Dr. John Rose Brandford. Particularly instructive is his discussion of the various forms of albuminuria and the varieties of uremia. Dr. Brubaker's section on Physiology presents the

recent advances in the physiology of the glandular system with special reference to the therapeutic value of gland extracts in their therapeutic application. He also presents the most recent conclusions on the study of artificial fertilization. The section on Hygiene by Dr. Baker is notable because of the universal interest excited by the discussion aroused by Dr. Koch's statement that bovine tuberculosis is not dangerous to man, and the recent researches as regards the transmission of yellow fever. The Practical Therapeutic referendium, by Dr. E. Quin Thornton, although placed last in the book, possesses the greatest general interest and value to all practicing physicians. All the recent therapeutic methods and remedies are presented and their merits and demerits impartially discussed. It constitutes a therapeutic manual of the most advanced methods of treatment.

In this brief synopsis of the contents only the most prominent features are touched upon. In each section every recent advance of value in relation to the diseases described is fully written of and from the most practical standpoint. The contributors are all authorities of the highest standing. The book is not a mere compilation of recent literature, but a series of critical reviews and original papers by masters of the subjects whereof they treat.

F. W. C.

A Treatise on the Acute Infectious Exanthemata, Including Variola, Rubeola, Scarlatina, Rubella, Varicella, and Vaccinia, with especial reference to Diagnosis and Treatment. By William Thomas Corlett, M.D., L.R.C.P., London, Professor of Dermatology and Syphilology in Western Reserve University; Physician for diseases of the skin to Lakeside Hospital; Consulting Dermatologist to Charity Hospital, St. Alexis Hospital and the City Hospital, Cleveland; Member of the American Dermatological Association and the Dermatological Society of Great Britain and Ireland. Illustrated by 12 coloured plates, 28 half-tone plates from life, and 2 engravings. Pages viii-392. Size, $6\frac{1}{2}$ by $9\frac{1}{4}$ inches. Sold only by subscription. Price, extra cloth, \$4.00 net, delivered. Philadelphia, F. A. Davis Company, publishers, 1914-16 Cherry Street.

This volume is in my opinion unique, and fills a want which is constantly being felt, owing to the class of diseases of which this book deals, being now treated in special hospitals, very generally in cities under civic control. Medical students but seldom have the opportunity of seeing them. This is a matter of regret, for it is of the utmost importance that the acute infectious exanthema should be promptly recognized. The public are constantly being made sufferers from the want of this early recognition. As a proof of this I may mention that much of the smallpox which is now prevalent in this province is due to the fact that a number of cases

which recently occurred in a village near Montreal were diagnosed as chicken-pox. In reality they were cases of smallpox, and, though of a mild character, produced some severe cases. The obstacles then in the way of bedside instruction makes this subject one of the most difficult departments of medicine in which it is possible to obtain a sufficient degree of familiarity.

The coloured plates and photo-engravings are simply superb. They could not be truer to nature. This book should be in the hands of every undergraduate and practitioner in medicine, for a careful study of the plates will enable a correct diagnosis to be made, even though a case has never been seen. The text is quite up to date.

F. W. C.

The Life of Pasteur. By René Vallery-Radot, translated from the French by Mrs. R. L. Devonshire, in two volumes. Price, thirty-two shillings. Westminster: Archibald Constable & Co., Ltd., 2 Whitehall Gardens, 1902.

These two volumes are produced in beautiful style. Volume one has as a frontispiece a likeness of Pasteur, which is admitted by his friends to be an admirable one. The biographer traces Pasteur's career from his birth, on Dec. 27, 1822, down to his death. It can well be imagined that the life of a man so distinguished in the scientific world must contain much of great interest, and it certainly does. No one can read these two volumes without being struck with the simple home-like nature which Pasteur possessed, associated with an independence and perseverance which was little short of marvellous. His departure from Arbois to attend school in Paris (and travelling in those days was no small undertaking) was a home picture which illustrated strongly his devotion to his parents. Twenty times were farewells repeated while the horses were being harnessed. His arrival in Paris and sojourn there, although he was accompanied by his greatest boy friend, was not such as inspired him to his work. He became low-spirited and excessively homesick, and, his father being notified, came to Paris and took him home. There he became annoyed at his want of courage in giving way to his feelings. For a time he tried to bury these by occupying his time in pastel drawings, but a nature such as his could not live in the quiet of his old home, and his ambition to pursue his education induced him to consent to again go away from it. This time he did not go so far as Paris, but to the Collège at Besançon, which he entered to prepare for the Ecole Normale. This was the turning point in his life, for his progress afterwards was steadily onward and upward. "Onward" was his motto, from an insatiable thirst for knowledge. Many successes and honours, the result of his chemical research in the laboratory, reached him, but his first marked honour came to him in 1854 when he was made Professor and Dean in the new Faculté

des Sciences at Lille. From this time, till stricken with hæmiplegia at the age of 46 years, his work had been of immense service to the various French industries. Though temporarily laid aside from work, his convalescence continued, and when the Franco-Prussian war broke out he was so improved that he looked forward to an early resumption of his laboratory work. But it was not to be till the war ended, by which time he had regained much of his strength and was able to move about. It was in 1873 that Pasteur wrote: "How I wish I had enough health and sufficient knowledge to throw myself body and soul into the experimental study of one of our infectious diseases." From this date more markedly is shown his more intimate relations with the medical profession. His views on germination, Lord Lister says, demonstrated to him the truth of the germ theory of putrefaction, and this furnished him with the principle upon which alone the antiseptic system can be carried out. He was invited to visit Edinburgh by Lord Lister "to see at our hospital how largely mankind is being benefited by your labours." From this time his work in the field of serum injections as preventative of certain diseases is well known to the majority of medical men. In hydrophobia his labours are known to lay and medical public alike.

Volume two is the most interesting to the medical practitioner, and will more than repay perusal. On the 28th of Sept., 1895, Pasteur died, leaving behind him a name which will endure, I was going to say, forever. Few men have done more for his generation than he has. His biography will well repay perusal, and we commend it to all our readers.

F. W. C.

PUBLISHERS DEPARTMENT.

LITERARY NOTE.

"No. 3000."

Not many magazines live to print their three-thousandth number, yet the issue of *The Living Age* for January 4, 1902, bears that number on its title-page. Founded by the late Mr. E. Littell, in 1841, this magazine has carried to its readers every Saturday for nearly fifty eight years whatever was freshest, most important and most interesting in the whole field of foreign periodical literature. It has retained its essential characteristics through this long period, and, while other magazines have come and gone, has strengthened its hold, year by year, upon the intelligent constituency to which it ministers. Art, science, travel, biography, literary criticism and appreciation, poetry, fiction, politics and international affairs—whatever is of broad human interest finds a place in its well-filled and clearly printed pages; and despite the multitude of younger magazines, competing for the public favour, there never was a time when this venerable eclectic was more nearly indispensable to alert readers than to-day. It is published by *The Living Age* Company, Boston.

CANADA MEDICAL RECORD

FEBRUARY, 1902.

Original Communications.

RETROSPECT OF LARYNGOLOGY.

UNDER THE CHARGE OF

GEO. T. ROSS, M. D., D. C. L.

Fellow American Laryngological, Otological and Rhinological Society. Laryngologist
Western Hospital, &c., Lecturer on Laryngology and Rhinology
Medical Faculty University of Bishop's College.

TUBERCULAR LARYNGITIS.

St. Clair Thomson concludes an article on this subject as follows:—Early diagnosis can only be made by watching the development of successive pictures by prolonged observation, not that of to-day alone, but that of yesterday and to-morrow, in order to decide for or against laryngeal tubercle, including careful examination of the entire body.

Pathology and clinical experience show that in the majority of cases the focus of infection is near or in the cricoarytenoid joint. Early diagnosis should be made while the disease is in an incipient stage. Any persistent or suspicious laryngeal catarrh should be treated seriously. Once diagnosed the patient should be treated on the principles laid down in the modern method of sanatorium treatment. Symptomatic treatment should be directed to any irritative catarrhal or obstructive state of the air passages, and silence should be enjoined to rest the parts.

Ewart gives the result of protargol injections, and says the method has yielded by itself satisfactory results, but it is not claimed to be more than the first and most important instalment in an extensive system of active treatment. He

has found that ichthyol is the best internal remedy, although a place is still to be found for the old remedies as necessary adjuncts. The continuous inhalation of oxygen, for instance, is stated as compatible with the most useful forms of medication. Ichthyol is given after meals, a few drops in peppermint water with a daily increase of one minim till ten minims are taken. In some cases as much as twenty minims have been taken with advantage.

RONTGEN RAY IN THE DIAGNOSIS OF TUBERCLE OF LUNGS.

Bonnet-Leon publishes his results in diagnosis of pulmonary tuberculosis in early stage. In over 600 observations where he employed the fluorescent screen he was able to make a precise diagnosis of tuberculosis in 98 per cent. of the cases even at the commencement of the disease. In the very earliest stage a diagnosis could be arrived at by observing the diaphragm and the inspiratory muscles. Anomalies in the synchronism, or the amount of displacement of the two halves of the diaphragm, one might always diagnose a predisposition to tuberculosis or a commencing tuberculosis. In this way a number of persons apparently in good health had become suspected, in whom some months or years afterwards unmistakable evidence of this disease had manifested itself.

THE NASO-PHARYNX IN SCARLATINA.

Seibert says that to clean and to disinfect the infiltrated mucosa in the naso-pharyngitis of this disease, irrigations with 1 to 5 per cent. warm solutions of ichthyol, repeated every six hours, have been successfully used. A half pint is allowed to flow through the nares and the naso-pharynx from a fountain syringe suspended about three feet above the patient. When the infiltration is so far advanced as to obstruct the passage-way between the nose and throat, irrigations will be found insufficient, for the fluid then returns through the other nostril without coming in contact with this cavity. During the past year six cases of scarlatinous naso-pharyngitis, in which irrigations were insufficient, have been treated in a manner which readily overcame the obstruction; this consists of local applications of a 50 per cent. resorcin solution in alcohol. These resorcin-alcohol applications have

proved themselves to be perfectly harmless, and are indicated in scarlatina as soon as the naso-pharynx becomes involved.

CHLORIDE OF ETHYL IN NASAL SURGERY.

Mackie says this anaesthetic greatly simplifies and facilitates his work in nasal and throat treatment. Two thousand cases are quoted wherein it has been employed, in which no dangerous symptoms manifested themselves. He claims that if this anaesthetic is used carefully it is an ideal one for the narcosis of minor surgery. The principal advantage of it is the rapidity with which patients come under its influence, while the apparatus for giving it is not as cumbersome as that for nitrous oxide. Goldan, in the *Medical News* differs from these conclusions, but does not set forth the data furnished by Mackie.

ACUTE TONSILLITIS.

Floersheim claims remarkable results from the application of tincture of iodine in this disease. A camel's hair brush with the tincture is rapidly passed over all the inflamed area. Should intense burning result, a gargle of plain warm water is enough to relieve the condition. While, if no burning is felt, the remedy is applied a second time, from three to five minutes after the first application. The results are said to be marvellous, for in five minutes the pain and difficulty in swallowing are relieved. Ordinary measures were used subsequently, but in many cases it seemed to abort the trouble, and nothing else was done.

Selected Articles.

INFANT FEEDING.

"In reviewing the immense amount of literature which has accumulated on the subject of infant feeding we find that the superiority of breast feeding is acknowledged so generally that it may be said to have become a scientific truth. On the other hand, the opinions expressed regarding artificial feeding are so diverse, and so opposed to one

another, that it is evident that much which has for years been taught must be unlearned, or rather admitted to be untrue, before we can expect to make any intelligent advance in this most difficult subject."—*Rotch*.

In the decade which has elapsed since the above statement appeared (Cf. "Keating's *Cyclopædia of the Diseases of Children*," Vol. I, 270) no subject has received greater attention at the hands of the profession, in the way of scientific study and clinical experiment, than has that of "infant feeding," whose generous bibliography is unequalled by that of any other branch of medicine; and, while important advances have been made in our knowledge of the composition and preparation of substitute foods, especially from a chemical and bacteriological standpoint, yet a critical review of recent text-books and magazine articles reveals the fact that the same diversity of opinion, regarding details in the methods of artificial feeding, exists to-day among specialists as well as the rank and file of the profession, as that which was complained of by Prof. Rotch ten years ago; therefore, we feel justified in heading our article with the above-quoted expression of this author's pessimistic views. In other words, we believe now as did he then, that much which has been taught and accepted as truth (even during the past ten years) "must be unlearned, or rather admitted to be untrue," ere we shall come to an intelligent understanding and agreement upon this important subject.

Concurrence of Opinions.—It is agreed that, inasmuch as breast milk is the child's natural food, it should serve as the standard by which to judge artificial foods; and it is the generally accepted opinion, that, if for any sufficient reason the babe cannot be nursed, the most practical substitute food is cow's milk. The only mooted question is—how shall it be prescribed? Regarding this point, there is great discordance of views; but we believe it is now admitted by pediatric specialists and by every general practitioner of experience that the milk should be diluted or modified so as to correspond as nearly as possible with mother's milk in the proportion and amount of its chief constituent parts—i. e., its proteids, fat and sugar. The analysis of breast milk shows that these three essential ingredients are present in the following approximate proportion: proteids 2, fat 4, sugar 7; while in cow's milk they are found as follows: proteids 4, fat 4, sugar $4\frac{1}{2}$.

It will be seen that in modifying cow's milk the proteid must be reduced one-half by diluting the milk. This reduces the fat and sugar also. Hence fat and sugar must be added. The theoretical problem, therefore, is simple: Reduce the proteid by diluting the milk; increase the fat and sugar by adding those elements. To accomplish this purpose it has been customary to dilute one pint of milk with an equal quantity of water; but as the already deficient amount of sugar has then become still further reduced (to $2\frac{1}{4}$) the deficiency is made up by adding a tablespoonful of granulated sugar or milk sugar to one pint of the mixture. As fat has also been reduced one-half (to 2) a small quantity of cream is generally added.

Another point upon which physicians agree is, that milk from the herd is better than one cow's milk, on the ground that it is less likely to vary in its composition from day to day. Again, it is admitted that sanitary conditions should be insisted upon at the dairy and due precautions be taken to prevent bacterial infection. Not only should the cows be kept clean and healthy, but cleanliness should be observed by the men themselves at the time of the milking, while the various pails, cans, bottles, etc., should be made perfectly sterile. In other words the profession is now awakening to the importance of obtaining *clean milk*—that which is fresh from spore-bearing bacteria.

The majority of physicians are now convinced, from clinical experience, that diluted "condensed" milk is unfit for infant feeding—its prolonged use very frequently producing rickets. A dilution of 1 to 12, the one most commonly used, contains but $\frac{1}{8}$ the amount of fat and $\frac{1}{3}$ the amount of proteid of average breast milk. Double that strength contains but $\frac{1}{4}$ the proper amount of fat, but the amount of sugar is so excessive as to soon upset the stomach. It is evident, therefore, that a food so wide of the standard is not a proper one for the infant. The practice, too, observed now at some dairies, of using chemical preservatives in milk such as borax, boric acid, formaldehyde, etc.—is universally condemned as harmful.

Diversity of Views.—Concerning the best mode of modifying cow's milk so that it may resemble breast milk, not only in the proportion of its constituents, but in its digestibility—even our most eminent pediatricians are at loggerheads—one advocating "laboratory" and the other "home" modification, in both of which methods the strength

of the mixture may be varied according to the "percentage" of ingredients. Among those prominent in pediatric circles who have advocated laboratory feeding will be found the names of Thomas, Meigs, Rotch, Zahorski, etc., while on the other hand, Crandall, Chapin, Fischer and others suggest certain methods of home-feeding which are considered equally scientific and far more practical.

It will be found, too, that while some authorities favour the adoption of a process which effectually destroys bacteria, and inhibits certain fermentative changes—i. e., by sterilizing, pasteurizing, etc.—the majority of specialists are opposed to this procedure and recommend feeding upon fresh "raw" milk, which has been immediately cooled and kept at a temperature below 50° F. Then, too, many physicians believe it is unwise to add to the mixture any ingredient (especially of a vegetable nature) not found in normal breast milk, while others recommend the employment of certain cereal infusions as diluents. Again, while certain proprietary milk-foods are advocated by the general practitioner, the majority of specialists condemn each and all such foods in unmeasured terms.

From the foregoing observations it will be seen that the problem of "infant-feeding" is still in a maze of doubt and perplexity, and the physician who is anxiously searching for the correct solution will be the greater confounded the more he investigates the subject. It is our purpose, therefore, to present as briefly as may be the suggestions offered by certain prominent specialists, whose opinions must command respect, and leave it to the judgment of each individual reader which method he selects as being likely to prove most effective in actual practice.

Laboratory Feeding.—Since the establishment of the first modified milk laboratory, in Boston, in 1891, similar laboratories have been established in twelve other cities of the United States, besides three in Canada and one in London. Under the management of Messrs. Walker and Gordon (whose names these institutions bear), working under the scientific direction of Prof. Rotch, the system has been developed to an extent little dreamed of in the beginning, so that it is now possible for a physician to obtain any combination he may wish, and to have his directions carried out with the same care and accuracy with which his prescriptions are filled at the drug store. That is to say, the different constituents of milk may be varied at pleasure according to

the judgment of the physician—accuracy in the modification being thus assured. The chief function of the laboratory, then, is to fill prescriptions calling for certain percentages of fat, sugar and proteids, or anything else which the physician may desire to add—*e. g.*, cereals, mineral matters, malt, pancreatin, patent foods, etc.,—or the milk may be ordered sterilized, pasteurized or raw.

The general principles to be observed in laboratory feeding are, of course, those of percentage feeding in general. The most important indications according to which the percentages of fat, sugar and proteids are to be varied may be summarized as follows: Habitual vomiting or regurgitation is almost always due to an excess of fat or to over-feeding; and, for an infant with such symptoms, the percentage of fat must be reduced as well as the quantity of milk. If the patient is not gaining in weight, and yet has no special signs of indigestion, the rule is to increase the percentages of all the ingredients. "Habitual colic," says Holt (*Cf. N. Y. Med. Jour.*, Jan. 12, 1901), "is nearly always from an excess of proteids. For such a condition one should not give more than one third as much proteids as fat, and usually at first very low percentages. This condition is commonly associated with the presence of curds in the stools, which requires the same treatment." For obstinate constipation increase both fat and proteids. Something should be said, however, regarding the changes required in milk modification during very hot weather. At such times both the proteids and fat must be reduced, but particularly the latter. It is seldom wise in any case, even with perfectly healthy children, to have the fat in the summer months over 3 per cent. and during short periods of excessive heat it should be reduced to 2 per cent. It is a good rule to begin with very young infants, with low percentages, especially of the proteids, which should not be above .50 per cent. for the first two weeks of life, and some authorities say .25 per cent. Fats and sugars should also be moderately low, about 2 per cent. for the former and 5 per cent. for the latter. Of course, much older children sometimes require these low percentages; but for a short time only.

Home Feeding.—The prime object in modifying milk is to obtain a mixture upon which the infant will thrive, and many prominent pediatricists have become satisfied from clinical experience that if care be taken to select good cow's milk, in which the growth of bacteria has been prevented by cooling, and due observance has been had in regard to

cleanliness, etc.—that the modification of milk (with reference to percentages) may be employed with the same accuracy and much more practically at the home of the patient by devoting attention to certain important points. It is well known, for instance, that the fat in milk, which has stood a short time, rises gradually toward the surface and eventually forms cream; so that there is a period during which the percentage of fat exists in regularly increasing ratio, advancing from the bottom toward the top. Advantage has been taken of this fact, and the following plan adopted for obtaining certain percentages:

The milk (rapidly cooled and strained after milking) is put in sterilized quart bottles, such as dairymen use, and kept so until used—standing in the ice-chest from 12 to 24 hours. The upper portion of the milk is now richest in fat, which has disseminated itself from below upwards, and any percentage desired may be calculated from the following table:

9 ounces top milk, 12 per cent. fat, 4 per cent. proteid.			
11	"	"	"
15	"	"	"
20	"	"	"

The top 9 ounces (or more, as the case requires) of cream and milk are removed by using Chapin's one-ounce dipper; and, after proper dilution with water or otherwise and the addition of sugar, it is ready for feeding. If we wish to make a mixture containing proteid, fat and sugar, in the proportion of 2, 4, 7 (the proportion found in breast milk), we require a top milk containing twice the amount of fat desired—*i. e.*, 15 ounces top milk. The method, then, is exceedingly simple. The top fifteen ounces are dipped out, diluted one-half, and the required amount of sugar added (usually a tablespoonful to the pint or one ounce to twenty ounces of the mixture). The mixture then contains proteid, fat and sugar in the proportion of 2, 4, 7.

The importance of procuring clean milk cannot be overestimated, and if the same care be taken that only the best shall be used, as is observed in the Walker-Gordon laboratories, there is no reason why the proportions should not be made as accurate in home-feeding as in laboratory feeding. The fitness of milk for infants' food depends largely on the percentage of lactic acid present and on the number of bacteria to the cubic centimetre. In the words of a prominent chemist: "Lactic acid is due to the 20 varieties of bacteria out of 200 that may be present in milk.

The lactic acid bacteria come from the teat of the cow, and can be largely eliminated by throwing away the first few streams when milking. Pathogenic bacteria get into the milk through the water used in cleaning the vessels or from persons who handle the milk. Putrefactive bacteria come from the manure. Great care should be taken in cleansing the udder and teats before milking, as well as the hands and finger nails of the milker, who should wear a duster over his working clothes. The stables should also be clean." The general practitioner is now awakening to the supreme importance of this subject, and the future is likely to witness improved methods in the production as well as in the distribution of milk throughout the country.

Sterilization.—Pediatrists are now practically agreed that sterilized milk is unfit to be used for any length of time as an infant's food; but the general practitioner, who is somewhat rusty in his chemical knowledge, has been slow to recognize the fallacy of the method, and many physicians have yet to learn that heating milk to a degree necessary to effect its sterilization (*i. e.*, to destroy existing bacteria) must necessarily produce chemical changes therein, which will seriously interfere with its nutritive properties as well as its digestibility. Recent investigations have shown that milk raised to a temperature of 100° C. is altered in the following particulars:

1. Its proteids are modified and rendered less digestible, *i. e.*, the lactalbumin and globulin are coagulated, and the casein so altered as to increase its resistance to the disintegrating action of the gastric ferments.

2. The combination of its saline ingredients with the proteids is more or less broken, and the salts assume a condition in which they are less readily absorbed, *i. e.*, the lactose is partially changed and the organic phosphorus is converted into an inorganic phosphate, both of which changes interfere with the digestibility of the milk. Wroblewski has shown, too, that certain of the calcium salts, necessary for the coagulation of the milk in the stomach (and which in raw milk are in a soluble state) are made to enter into insoluble combinations by a high temperature.

3. Natural ferments which are present in milk, and which naturally assist its digestion in the infant's stomach, are destroyed; Russell and Babcock having proved that unsterilized milk undergoes a self-digestion owing to the presence of a trypsin ferment readily destroyed by heat.

4. Alteration in the normal emulsion in the milk also takes place from the action of heat lessening its digestibility.

5. Observations point to the fact that immunity to disease may be conveyed through the mother's milk, and that such immunity—conferring substances (present in raw milk) are destroyed by a heat of 60° C. or over, thus rendering children, fed exclusively on milk sterilized at a high temperature, more liable to certain infections leading to disturbances in general nutrition.

6. Clinical experience has shown that such affections as scurvy and rickets, and other disorders of malnutrition, may result from a diet from which raw, fresh food is excluded.

In his work on "Infant Feeding," recently published, Prof. Louis Fischer devotes considerable space to and emphasizes the necessity of feeding with cow's milk in its "natural state," *i. e., feeding with raw milk*. "This," says one prominent author, "seems off hand like a broad statement, but when we consider that breast milk is 'raw milk' and that we are simply copying from nature by feeding, then we can readily see the vast importance of this method of feeding. Clinical evidence is certainly in favour of feeding milk in its raw state owing to its anti-scorbutic qualities, and besides it does not cause that terrible bug-bearer of the beginner and possibly also the older practitioner, *viz., constipation*."

Does it not, then, seem better to aim in securing *clean* milk and applying the principles of sterilization, or, if you prefer the term, pasteurization, to the stable, to the milker's hands and to all utensils coming in contact with the milk from the beginning to the end of the milking? In this manner we do away with the possible contamination of the milk, with stable and other filth, and avoid infection with micro-organisms.

Diluents.—No phase of the infant-feeding problem has been studied so assiduously or created so much controversy as has the vexed question of "diluents"; and, while all authorities are agreed that cow's milk should be diluted with something to bring down the excess of proteid; yet there is great diversity of opinion as to which is the best agent to use for this purpose. Simple dilution with water has been recommended by some; others suggest the addition of an alkali, such as plain or saccharated lime-water; one prominent paediatrist favours a decoction of gum-arabic or solution of

gelatine as a diluent for very young infants, and another equally noted specialist argues strongly in favour of cereal infusions. It is our purpose here to call attention to the latter method, which is probably more extensively employed than any of the others, and give, in brief, the reasons advanced for its use, by its chief promoter, whose name is favourably known in pediatric circles over the entire world.

In a paper entitled "The Place of Cereals in Infant Feeding," read before the American Pediatric Society, at Niagara Falls, May 28, 1901, Henry Dwight Chapin, M.D., of New York, recommends for use as a diluent in home modifications a predigested cereal gruel made as follows: "Make into a paste two tablespoonfuls of wheat or barley flower with cold water, and add to a quart of water. Boil fifteen minutes; add a pinch of salt. When cool add to this a preparation of diastase. Cereo (a glycerite of diastase) is especially recommended, two teaspoonfuls to the quart. Of this diluent, now dextrinized, add three parts to one part of the 'nine ounces of top milk'; add the sugar, one part to twenty, and you have a humanized milk." "On the theoretical side," says this author, "it must be confessed that, at first sight, the employment of a material in a form not found in human milk may appear unwarranted to those who desire a strictly scientific reason for all procedures." But, we may add, if it can be shown that the curd of cow's milk is thus rendered more digestible, a strong reason appears for its employment.

The introduction of system into infant feeding has been a great advance and has doubtless come to stay, but it has also emphasized the fact that changing the percentages in cow's milk to correspond with those in breast milk *does not change cow's milk into woman's milk*. Changing the percentages of proteid, fat and sugar, in cow's milk to equal those of woman's milk simply records the quantities of those ingredients in *cow's milk*. While we must admit the importance of effecting this agreement (*i. e.*, in the percentages of these three essential ingredients), and believe that it should always be accomplished, yet we must not remain blind to the fact that one of these ingredients of cow's milk, viz., the proteid, is not of the same *nature* as that of mother's milk. In other words, the proteid in the latter is one part casein to two parts albumin and globulin, while in cow's milk the proteid is composed of four fifths casein. Inas-

much as albumin and globulin are readily soluble and easily digested and absorbed, while casein is insoluble and must undergo certain transformations before it can be absorbed, it will be seen that the proteid of cow's milk ($\frac{4}{5}$ casein) requires more digestive effort than the proteid of woman's milk ($\frac{1}{3}$ casein).

It may be seen the amount of curd formed in milk depends upon the proportion of casein present, and the less bulky the curd the more easily digested is the milk. White and Ladd, of Harvard, as a result of their experiments, have arrived at the conclusion that, by the use of whey as a diluent of creams of various strengths, they are able to modify cow's milk so that its proportions of casein and soluble (whey) proteids will closely correspond to the proportions present in human milk—thus rendering it much more digestible and suitable for infant feeding. They claim that whey cream mixtures yield a much finer, less bulky and more digestible coagulum than plain modified mixture with the same total proteids. They admit, however, that barley water mixtures yield a coagulum equally fine. It will be seen, therefore, that it is to break up the curd of cow's milk, and thus furnish a small quantity of easily absorbable food, that cereal gruels (in which the starch has been converted into dextrin and maitose) are advocated as diluents; it having already been shown that the curd of cow's milk, with a digested gruel diluent, passed through a sieve having 900 meshes to the square inch, while those with water diluent remained on the sieve. How much effect a digestive gruel has on the curd of milk depends, of course, on the strength of the gruel and the dilution of the milk.

Thus, after years of careful study and experiment, it has been found that cow's milk may be so modified as to correspond very closely to mother's milk, not only in the relative proportions of its total constituents (proteid, fat and sugar), but also in the composition of the proteid itself—the casein being so reduced that a much less bulky curd is formed which is more easily digested. It is for this latter purpose that White and Ladd's "whey mixtures" and Chapin's "cereal infusions" have been recommended; and, though experience has proven that they are advantageous in many cases, yet the fact remains that, though the curd has been reduced in amount, it is not of the same *character* as that formed from mother's milk, *i. e.*, it is still often re-

gurgitated from the infant's stomach in hard, lumpy masses. To overcome this latter difficulty, after many expedients have been tried and nothing found that the patient will tolerate (and where there is little time for further experiment), the following plan may always be adopted and for the reasons hereinafter given :

Caroidization.—There are two great classes of milk :
1. Those that form hard, solid curds with rennet—cow's milk. 2. Those that form soft, flaky curds with rennet—woman's milk. In other words, the rule seems to be that animals that ruminate furnish their young with milk that curds in solid lumps and animals that masticate their food before swallowing it furnish their young with milk that curds in soft flakes. The human stomach receives food in a finely divided state, and woman's milk curds in loose flakes.

Dr. Brush has explained this property of forming hard curds as belonging to the milk of all cud-chewers in contradistinction to the softer and more flaky curds of the milk of those animals which are not cud-chewers. He says : "The young of the former all chew the cud soon after birth, therefore the milk designed for their use contains a variety of casein which coagulates into a mass sufficiently hard and consistent to be regurgitated and chewed." Furthermore, it has been shown by analysis (Cf. Richmond's "Dairy Chemistry") that the milks that form solid curds with rennet are furnished by animals whose normal digestion is *prolonged* and whose alimentary canals are relatively very much longer than those animals whose milk forms soft flaky curds. It is evident, therefore, that the human infant's stomach is likely to find difficulty in digesting the casein of cow's milk (even when present in the same proportion as in mother's milk) unless it is first partially broken up so as to form a fine, flocculent curd—easily disintegrated and rendered fit for absorption.

It has been found that during digestion there is an increased elimination of nitrogen from the system which is proportional to the intensity of digestive work ; also an increase of about fifteen per cent. in the quantity of oxygen consumed and a larger increase of carbon dioxide thrown off. This shows an immediate demand for proteids and carbohydrates at the *beginning* of a meal ; and it is known that when milk is taken into the stomach the first step in its digestion is a separation of the easily absorbable albumins

and sugars from the casein and fat, which require digestion as they are left in a semi-solid state.

It will thus be seen that the increased demand for proteids and carbohydrates, during digestion, is met by a separation of the soluble constituents of the milk as soon as it is swallowed. Furthermore, the secretion of all the digestive juices is promoted by this absorption at the beginning of the meal, *i. e.*, the normal digestive process is ushered in. This is what happens when woman's milk is taken. But when cow's milk diluted with water is given to an infant the quantity of readily absorbable food is reduced to almost nothing, and the proteids and fat form a solid curd which is either regurgitated or passes on into the intestines to ferment and serve as a source of irritation. The result of this process, if continued, is to interfere with the secretion of the digestive ferments; and milk which enters the stomach finally meets with the same reception that it would if it were injected into the rectum, *i. e.*, it remains unabsorbed because its insoluble constituent (casein) has not been changed into (soluble) peptone. Every practitioner of any experience knows that in feeding by the rectum the milk must first be peptonized—or it will not be absorbed.

For the same reason in many cases of infantile mal-digestion the casein of cow's milk must be put into a partially digested or soluble condition before its administration, *i. e.*, it must be acted upon by a ferment. The value of barley water and other cereal infusions, in breaking up and making the curd soften, is due to the action of the starches and diastasic ferments which they contain. The food that is most finely divided and can most easily leave the stomach is the most suitable for weak digestions. Digestive enzymes act by contact, and neither take away nor add anything to the substance acted upon. For this reason, a pure vegetable ferment, like caroid, is superior to a cereal infusion which adds starch, cellulose and other constituents to the food, which must themselves be digested.

In all cases of faulty digestion, therefore, caused by the formation of insoluble curds in the infant's stomach, caroidized milk prepared as follows will be found of the greatest utility: Heat the purest, freshest cow's milk obtainable (modified as suggested under "home feeding") until lukewarm, then stir two or three grains of caroid into it, and when the curd has set (which will be within two or three minutes) beat it up until it is almost re-liquefied. Re-warm this if necessary, and feed through a nipple as in ordinary

bottle feeding. After the caroid has been added the milk must not be allowed to stand very long, as it will acquire the bitter taste characteristic of the formation of peptone. Each feeding should be prepared separately, therefore, and should be fresh.

The advantages of the above method are: 1. That it is impossible to re-curdle milk thus treated, hence tough and indigestible curds are avoided. 2. Digestion will go on in both the stomach and intestines until the casein is entirely absorbed, the process being assisted partially by the digestive apparatus of the infant.

As hyperacidity usually prevails in the infant's stomach in cases of maldigestion some physicians prefer to neutralize this condition by adding lime water to the milk in the proportion of one to four. This may also be done with caroidized milk. An efficient substitute for lime water is the "liquor calcis saccharatus" of the British Pharmacopœia, from five to fifteen drops of this solution being added to each half pint of the milk mixture.

REFERENCES.

1. "Practical Hygiene," Charles Harrington, Phil., 1901.
2. "Therapeutics of Infancy and Childhood," A. Jacobi, Phil., 1898
3. "Manual of Diseases of Children," John Madison Taylor, Phil., 1901.
4. "Infant Feeding, etc.," Louis Fischer, Phil. and Chicago, 1901.
5. "The Feeding of Infants," Joseph E. Winters, New York, 1901.
6. "Diseases of Children," Wm. M. Powell, Phil., 1901.
7. "Artificial Feeding of Infants," Blackader, *Ref. Handbook of the Med. Sciences*, VIII.; 92-102.
8. White and Ladd, *Phil. Med. Jour.*, Feb. 2, 1901.
9. Practical Food Prescribing, Crandall, *Dominion Med. Mo.*, June, 1901.
10. Percentage and Laboratory Feeding, Griffith, *Phil. Med. Jour.*, Mar. 16, 1901.
11. Laboratory Feeding, Thomas, *The Cleveland Med. Gazette*, Aug., 1901.
12. Cereals in Infant Feeding, Chapin, *Med. Rec.*, July 6, 1901.
13. Whey Cream Modifications in Infant Feeding, *Med. Age*, Feb. 25, 1901.
14. Sterilization of Milk, Blackader, *N. Y. Med. Jour.*, Feb. 2, 1901.
15. Substitute Infant Feeding, Chapin, *N. Y. Med. Jour.*, XXIII.; No. 8.
16. The Artificial Feeding of Infants, Holcombe, *The Med. Council*, Mar., 1899.

A PLEA FOR LARGER DOSES OF ANTITOXIN IN THE TREATMENT OF DIPHTHERIA.

BY JOHN H. MCCOLLOM, M.D.

DR. MCCOLLOM first calls attention to the statistics proving the fact that, in the time previous to the use of antitoxin, diphtheria was more prevalent and yielded a higher mortality rate in Boston than in London, Paris, Berlin,

Liverpool and Glasgow. He also quotes statistics which prove that in no other American city has the mortality rate from diphtheria undergone such "marked and continuous diminution" as has occurred in Boston, and states that "a diminution from 18 per 10,000 to 4.99 in five years cannot be attributed to good fortune nor to the mild types of the disease. This diminution can only be explained by the use of antitoxin and treatment in hospital" "In the pre-historic days, previous to 1895, in the Boston City Hospital the rate (of mortality) was 46 per cent. In the same hospital, since 1895, during which time 7,657 patients were treated with antitoxin, the percentage of mortality was 12.9. It must be borne in mind that these were all cases of diphtheria both from a clinical and from a bacteriological point of view."

Dr. McCollom quotes statistics which prove that in the Boston City Hospital, where *very large doses of antitoxin were employed*, the mortality rate is much lower than in the other three large contagious disease-hospitals, viz., those of London, Glasgow and Philadelphia. "For instance, compare the hospital in Philadelphia with a percentage of mortality of 63 in children under one year of age, with that of the Boston City Hospital (contagious-disease department), with a percentage of 26." This difference is all the more striking when one considers that the mortality rate in very young children is extremely high.

Dr. McCollom quotes figures which show that this difference in mortality between the Boston City Hospital and other contagious-disease hospitals is equally pronounced among patients of all ages, and in the laryngeal types of the disease, and in the cases requiring intubation or tracheotomy.

These statistics, based upon thousands of cases, prove conclusively that, by large doses of antitoxin, many thousands of patients, who now die when only small or moderate doses are employed, could be saved by employing antitoxin in the quantities used in the Boston City Hospital. In the following quotation from Dr. McCollom's paper, the proper adaptation of the quantity of antitoxin to the individual case is tersely urged:

"No hard and firm rule can be made regarding the use of the serum. The agent must be given until the characteristic effect is produced on the diphtheritic membrane. In some cases 4,000 units will accomplish this; in other instances 60,000 or 70,000 units may be required. When a guinea pig is inoculated at the laboratory with a certain definite amount of the toxin of diphtheria, it is a very easy matter to antagonize this with a certain amount of anti-

toxin. In the case of a patient ill with diphtheria, there is no way of estimating the quantity of toxin generated by the membrane, and, therefore, one must administer the agent until the characteristic effect is produced, viz., the shriveling of the membrane, the diminution of the nasal discharge, the correction of the fetid odor and a general improvement in the condition of the patient. In the operative cases the beneficial effect of large doses of antitoxin has been marked, preventing, in many instances, the extension of membrane to the smaller ramifications of the bronchi—a most important factor in raising the death rate in this class of cases. In the operative cases, it is safe to say that nearly twenty per cent. of the deaths were caused by blocking of the bronchi with diphtheritic membrane. At the South Department the autopsies proved this fact.

“No case of diphtheria should be considered hopeless. Antitoxin should be administered in each and every instance. It has been my experience during the past few years to see so many patients apparently hopelessly ill recover that my convictions are very firm on this subject. When one sees a patient with membrane covering the tonsils and uvula, profuse sanious discharge from the nose, spots of ecchymosis on the body and extremities, cold, clammy hands and feet, a feeble pulse and the nauseous odour of diphtheria, and finds that after the administration of 10,000 units of antitoxin, in two doses, the condition of the patient improves slightly, that, after 10,000 units more have been given, there is a marked abatement in the severity of the symptoms; that, when an additional 10,000 units have been given, the patient is apparently out of danger, and eventually recovers, one must believe in the curative power of antitoxin. When one sees a patient in whom the intubation tube has been repeatedly clogged—when the hopeless condition of the patient changes for the better after the administration of 50,000 units, one cannot help but be convinced of the importance of giving large doses of antitoxin in the very severe and apparently hopeless cases. In the majority of instances these large doses are not required, particularly if the patients are seen early in the attack, 4,000 to 6,000 units being enough to produce the characteristic effect on the membrane. As illustrating the advantage of the early administration of antitoxin, an allusion to the cases of diphtheria occurring in the staff of the South Department may be of interest. There have been since September, 1895, 104 instances of diphtheria contracted in the line of duty, and not a single death. Each pa-

tient received a full dose of antitoxin (4,000 units) at the outset, or as soon as there were any symptoms of the disease. In some instances it was not necessary to repeat the dose; in others the doses were repeated two or three times. It is of interest to note that in this series of cases there were no marked symptoms of paralysis; that heart complications did not occur and that the duration of the illness was comparatively short. It must be borne in mind that these were genuine cases of diphtheria, contracted under unfavourable conditions.

"In the study of any particular line of treatment for a special disease, the clinical picture presented by patients ill with that disease is always of interest, and is frequently more conclusive than a simple array of figures. A short history of a few of the extremely severe cases of diphtheria, in which antitoxin was administered in large doses, will be given.

"*Case 1.*—A boy, six years of age. When admitted he had been ill three days; there was a large patch of membrane on each tonsil; the uvula was edematous; there was a profuse nasal discharge. Dyspnoea was very great, and there was marked cyanosis. The cultures were positive. Pulse feeble and rapid. Temperature, 99.5. There was a slight trace of albumin in the urine. He was intubated once, and given 4,000 units of antitoxin. The intubation tube not giving relief, it was removed in ten minutes, when the patient expectorated a quantity of thick, tough, tenacious mucus, and the breathing immediately became easier. On the second day after admission the dyspnoea was urgent, and the boy was re-intubed with marked relief. In four days this patient had 56,000 units of antitoxin without any injurious effect and with positive relief. He was discharged well. He had none of the usual sequelae of diphtheria. He did have a troublesome urticaria. The heart did not at any time have an irregular action; there was no indication of paralysis.

"*Case 2.*—A girl, six years old. She had been ill three days when admitted. The tonsils and uvula were covered with a thick membrane. Pulse rapid and weak. The membrane commenced to disappear in three days, but on the fourth it commenced to re-form, and, therefore, large doses of antitoxin were given. In all this patient received 80,000 units of antitoxin. The cervical glands suppurated. At one time during the course of the attack the action of the heart was irregular. There was a slight palatal paralysis. At one time there was a slight trace of albumin in the urine. She made a good recovery.

Case 3.—A man eighteen years old. He had been ill one week at the time of admission. There was great prostration; a profuse nasal discharge with a foul odour; there was a very extensive membrane covering the tonsils, uvula and palate. The action of the heart was feeble; the sounds indistinct. Pulse feeble. The general condition indicated speedy death. He had on entrance an initial dose of 6,000 units of antitoxin, repeated in five hours. The next day he had four doses of 6,000 units each, and on the third and fourth days a like quantity. On the fifth day after entrance the throat was clear and the mucous membrane normal in appearance. For the first four days delirium was a marked symptom. The patient was unable to swallow, and food and stimulants were given by the rectum. At one time there was a slightly nasal voice, but there was no marked paralysis. The action of the heart was regular at the time of discharge. A slight trace of albumin was found in the urine. Urticaria was an annoying complication, but not a grave one. There was no arthralgia. Brandy and strychnia were given in large doses. It is cases of this class that swell the mortality ratio of hospitals. "The patient was moribund when admitted; he left the hospital well, and has been well up to the present time. It is possible that the man might have recovered with a slightly diminished dose; it is certain that the usual doses of antitoxin would not have saved his life, and it is also certain that no injurious effect followed the large dose.

Case 4.—A coloured boy, seven years old. On admission this patient had a very weak pulse; the heart sounds were feeble; the tonsils, uvula and hard palate were covered with a dirty necrotic membrane; there was a profuse nasal discharge; the cervical glands on the right side had sloughed; there was an intolerable odour. His condition was as unfavourable as it could well be. The boy had 84,000 units of antitoxin in five days. He was discharged well in sixty-six days. At the end of the sixth day after entrance the condition of the patient had improved so much that no one who had not seen him on entrance would have believed that he had been so critically ill. He made a good recovery, which was somewhat delayed by post-diphtheritic paralysis. He was nourished during part of the time by the rectum. At one time during convalescence he had one-eighth of one per cent. of albumin in the urine. This albuminuria could not, however, be attributed to the antitoxin, as it is one of the most frequent symptoms in severe attacks of diphtheria, and was recognized and described long before the days of antitoxin.

"Many more cases might be cited in which large doses of antitoxin were given with satisfactory results, but enough has been said to prove that small doses of antitoxin are of little avail in the treatment of grave types of the disease; that, in order to obtain the best results, the serum must be heroically administered. It is true that all of the patients to whom large doses of antitoxin have been given have not recovered, but so many of them have that one must be convinced that large doses are imperatively demanded in very severe cases. When death has occurred it has been from nerve degeneration or from sepsis. In no instance was there any injurious effect produced by either the large or small doses of antitoxin. Albuminuria, although present in many cases, cannot be attributed to the serum, as albuminuria is one of the most frequent symptoms in diphtheria. Heart complications of a serious nature have not been so frequent in the 7,657 patients treated at the South Department as would have been the case in a like number treated without antitoxin. Paralysis, although occurring in the severer cases, has not been so prominent as it would have been in an equal number of cases treated without antitoxin. Urticaria and arthralgia are certainly very annoying complications, but they do not imperil the life of the patient, and are, therefore, not worthy of being considered an argument against the use of the serum.

"Although different remedies were used to prevent the extension of membrane before the advent of antitoxin, the death rate from diphtheria remained about the same until the introduction of antitoxin. Before the days of antitoxin there was no method of limiting the extension of the membrane. The number of different applications to the diphtheritic membrane was so great as to prove that no one of them was satisfactory. No germicide can be of sufficient strength to effectually destroy the bacilli of diphtheria without causing destruction of the mucous membrane, and thus opening a fresh field for the growth of the organism.

"From a comparison of the health reports of Boston (before and after the introduction of the anti-diphtheritic serum), from a comparison of the health reports of other cities, from a study of hospital reports, from a clinical observation of nearly 8,000 cases of diphtheria, the following conclusions are justifiable:

"1. That the ratio of mortality of diphtheria, per 10,000 of the living, was very high in Boston previous to 1895.

"2. That the ratio of mortality per 10,000 has been very materially reduced since the introduction of antitoxin.

"3. That the percentage of mortality in the South Department is lower than that of any of the hospitals taken for comparison.

"4. That, since larger doses of antitoxin have been given, the death rate has been materially reduced, the reduction having occurred in the apparently moribund cases.

"5. That no injurious effect has followed the use of the serum.

"6. That, to arrive at the most satisfactory results in the treatment of diphtheria, antitoxin should be given at the earliest possible moment in the course of the disease."

THE FOUR ESSENTIALS IN THE TREATMENT OF DIPHTHERIA.

1. Use antitoxin early—soon as diphtheria is suspected. For immunizing, 500 to 1,000 units are recommended.

2. Curative dose: Where the attack of diphtheria is slight and the patient is treated on first day of disease, 2,000 units is invariably sufficient; when treated on second or third day of disease give 3,000 units. Where the administration of antitoxin is delayed or disease is severe, never administer less than 3,000 units. In all cases repeat or double the initial dose if favourable results do not follow within six or eight hours after first injection—no bad results can follow its use. Remember the only danger is in insufficient dosage. Keep patient quiet and in bed.

3. Children require larger doses than adults, since they are more susceptible to the disease. Remember antitoxin is an antidote and sufficient must be given to fully neutralize the toxins of diphtheria. There is no danger of giving too much, but of using too little.

DIAGNOSIS IN DISEASES OF INFANCY AND CHILDHOOD.

By JOHN ZAHORSKY, M.D. St Louis.

Clinical Lecturer on Children's Diseases, Washington University, Medical Department;
Attending Physician to the Bethesda Foundling Home.

CONVULSIONS.

Infantile convulsions or eclampsia is that group of symptoms characterized by general or partial, irregular, clonic muscular contractions. Loss of consciousness accompanies these contractions.

The underlying pathologic condition is a heightened irritability of the central nervous system which results in

a series of motor discharges induced by a peripheral or central excitant.

It is assumed that the practitioner will recognize these clonic muscular spasms.

Having administered chloroform or utilized any other appropriate means, and the severity of the spasms having been subdued, the causation of the symptoms must be sought. Take the rectal temperature.

I.—A VERY HIGH FEVER IS PRESENT.

In the majority of cases a very high fever or hyperpyrexia will be found to exist. Further inquiry must then be instituted as to the cause of the fever. The principles laid down in the former articles on fever are perfectly appropriate in this condition. The same care must be observed in examining the various organs of the body for evidences of infection.

Affections of the respiratory tract, which are initiated with a high temperature, must be considered. Among these influenza and pneumonia are the most frequent. During an epidemic of influenza convulsions are exceedingly common among infants.

Infections of the gastro-enteric tract are the common causes of this group of symptoms. But no doubt in the past there has been too great a stress laid on intestinal irritants. Toxemia from decomposing food may excite fever and convulsions. At the onset of fermental or inflammatory diarrhoea and dysentery convulsions may arise. But it is not rational to assume, as many practitioners seem to do, that the majority of cases are caused by eating some indigestible food.

Eclampsia is a common symptom in all acute infections of the nervous system. When the attacks are repeated very frequently in twenty-four hours and the patient is over two years of age, cerebral infections must be strongly suspected. In infants, on account of the open cranial sutures and fontanelles, eclamptic seizures are less common even in grave cerebral diseases than might be expected.

The blood infections to be considered are malaria and the acute exanthemata. In malarious countries the former disease must invariably be given first place. Scarlet fever among the infectious diseases is the most apt to cause spasms.

Acute suppurative inflammations in any of the internal organs, as the bones, muscles, cellular tissue, liver, kidney, etc., may serve as the exciting cause.

In summer, during the very hot weather, thermic fever is not rare. When the temperature reaches 107 degrees convulsions are imminent.

II.—LITTLE OR NO FEVER IS PRESENT.

When little or no rise in temperature exists one is compelled to assume that some hereditary or acquired instability of the nervous system is present.

Under congenital or hereditary influences must be classed defects of the cerebral structure, cerebral paralysis, epilepsy and various neuropathic states not classified. A repeated afebrile convulsion in the absence of demonstrable organic disease always suggests epilepsy.

Among the acquired conditions are acute diseases and chronic diseases of the central nervous system, which produce alterations in its structure and functions. Acute encephalitis, cerebral hemorrhage, meningitis, etc. Each of these may have changes which thereafter leave the motor area in an unstable condition.

Nutritive disturbances, so common in infancy, must always be studied. Rickets is a condition which enhances the irritability of the nervous system, and slight excitants may initiate a motor discharge. The most characteristic is that form of tonic spasms called tetany, which must be sharply differentiated from the clonic spasms of eclampsia. Laryngo-spasm is rather similar to tetany.

Various forms of malnutrition may create an unstable nervous system. The starvation following disease of the stomach and intestines, tuberculosis, laryngeal stenosis and syphilis can so change the function of the nervous system as to result in great irritability.

Having determined the existence of this nervous instability the peripheral excitant must still be sought. In the presence of a slight fever some mild infection, such as influenza, tonsillitis, stomatitis and gastro-enteric disease should be suspected.

Simple irritation of the end organs of certain afferent nerves, whether this irritation is caused by thermal, mechanical or chemical agents may serve as the exciting cause. The skin, the alimentary mucous membrane, the genito urinary tract and the respiratory tract must each be separated, studied. The baby must be stripped and examined. Inquiry must be made as to the recent diet. The genitive organs should be examined as to the presence of phimosis. The urine should be studied for uric acid crystals.

Sudden changes in the intracranial pressure, whether induced by a paroxysm of pertussis, a severe straining, as in constipation, enlarged thymus gland or other tumour pressing on the large vessels leading to the cranium, each of these may serve as a factor in the etiology.

When all our efforts fail to locate the cause outside of the brain, and the convulsions are repeated, the brain must become the point of continued study. Epilepsy is the most common. But cerebral tumour, abscess, chronic hydrocephalus, cerebral syphilis, hemorrhage and chronic meningitis, each must be carefully excluded.

Many times severe injuries to the cranial vault, or to other parts of the body result in convulsions. But here the immediate history or the signs of injury at once suggest the cause.

Hysterical convulsions occur also in childhood. They are often puzzling, and only careful study will reveal their true nature.

But often a convulsion will come and pass away harmlessly, and the physician will not have been able to make a positive diagnosis.—*Med. Fortnightly*.

TONSILLITIS.

Diagnosis.—Dundas Grant says that occasionally the medical attendant and friends of patients affected with acute tonsillitis are considerably alarmed by the appearance, on the upper and posterior part of the tonsil, of what seems to be a deep excavated ulcer of oval shape, the floor of which is covered with a white, slough-like membrane.

Killian points out that in the new-born child the tonsil consists of three masses of tonsil-tissue, between which are two furrows; the uppermost mass and the furrow next to it are the most persistent; the lower furrow gradually disappears, and the tissue, which forms the bulk of the adult's tonsil, is covered to a considerable extent by a triangular fold of membrane running downward and backward from the anterior pillar of the fauces.

Killian recommends for the better examination of the tonsil that the head should be turned toward the affected side, the tongue pulled out toward that side and the opposite angle of the mouth retracted while the patient utters the sound "hay." In this position the tonsil is looked at more nearly from the middle line, so that the furrow and the marginal cushion above and behind it can be readily recog-

nized. It is extremely probable that the furrow has been frequently mistaken for excavating ulcers by others, as they have been personally.

Etiology.—Follicular tonsillitis and peritonsillitis are believed by Joseph Meyer to be due to the infection of toxins or bacteria, the latter probably made active by what is commonly called a cold, setting the bacteria into action, upon a field which they before may have occupied, but, through said cold, the field has become a field of less resistance and a most suitable soil for bacterial activity and absorption of toxins. The tonsils may have, as claimed by some, anti-bactericidal properties, but because of their peculiar conformation they also have, in a high degree, the capacity for storing bacteria and putrefactive matter, either of which may become active through a cold or of their own accord at any time that conditions are favourable.

Prophylaxis.—W. Freudenthal says that it is impossible to prevent acute lacunar inflammation by the use of any drug, but it can be done by attention to the climatic factors, which play an important rôle in the etiology of this affection. To prevent acute lacunar amygdalitis one should not bundle up children in cloths, but harden them to changes of temperature. Mucus dropping down into the naso-pharynx and drying, acts as a foreign body, and causes an irritation which predisposes to lacunar inflammation. The obvious indication is to treat the naso-pharynx.

Treatment.—Joseph Meyer thinks that the abortive treatment of follicular tonsillitis and peritonsillitis consists of two things, viz.:—

1. Treatment of the initial stage.
2. Cleansing the lacunæ by syringing them with bichloride solution 1 to 1000.

If the patient is seen early enough and the preceding symptom of a cold are present, a uniform temperature, also rest in bed, with hot beef-tea or milk as a drink, getting up a good sweat followed by a hot towel rub-down, will often abort or ameliorate an attack of follicular tonsillitis or quinsy by bringing about less favourable condition for bacterial action.

A simple one-fourth or one-half ounce syringe of the laryngeal type is personally used for syringing the lacunæ. If the mouths of the lacuna are narrow, one of the lips may be lifted up with a cotton-carrier or blunt curette, stretched slightly, or opened with a small knife, and then the syringe

can be introduced with ease. The nozzle of the syringe should be introduced deeply into the lacunæ and the fluid injected; often one will be surprised to see a plug come out of a neighbouring lacuna or the fluid injected from a number of lacunæ. The relief often is immediate.

In cases where most of the inflammatory trouble has passed over, but one or two lacunæ are filled with cheesy matter, leaving still a sore sensation, some pain on swallowing, with some swelling of the tonsil; this method is admirably adapted. The syringing must be thoroughly done with a proper syringe, and quite warm bichloride solution (1 to 1000).

According to Samuel Floersheim, the local application of tincture of iodine in acute tonsillitis is of value. The method of application is simply to saturate a long camel's-hair brush with the tincture of iodine, and rapidly brush over the inflamed area *i.e.*, tonsils, pharynx, uvula, fauces, etc. Should the patient experience intense burning after two minutes, a gargle of plain, warm water suffices to relieve the condition. If the patient does not experience the burning the remedy is usually applied a second time, from three to four minutes after the first application. The results have been marvelous. Patients who had considerable pain were relieved, and those who could not sleep, eat or drink were also relieved within five minutes.

In 68 cases of acute catarrhal and follicular amygdalitis treated by this method within the past two years the most gratifying results have been noted. Relief from the distressing symptoms was observed within five minutes after the application of the remedy to the inflamed area in every case observed. The intense redness and swelling also became considerably decreased within five minutes.

When the inflamed area, after twenty-four hours, had shown much improvement with a tendency toward a rapid cure, the application of the tincture of iodine was not repeated. In some of the cases nothing else was done; in others the usual throat remedies appropriate to the disease were prescribed.

M. R. Ward says the treatment of acute lacunar inflammation should be both local and constitutional. The local application of guaiacol is alleged by some to have the power to abort the process. Small pieces of cracked ice or ice water are decidedly useful in the early stages. The patient should be freely purged with calomel or with effervescent phosphate

of sodium. The value of tincture of chloride of iron cannot be over-estimated, and it should be given throughout the acute stage. Codeine, salol and phenacetin relieve the headache and other pains. The tonsils should be removed in the interval of the attacks.—*Monthly Cyclopædia of Medicine.*

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

USES AND ABUSES OF ARSENIC.

Arsenic is one of our most valuable medicines, and one that is not as popular as it should be among the profession generally. Many practitioners who do not see much of skin diseases seem to have an idea that arsenic is a remedy which can be administered in almost every lesion of the skin with advantage, and fail to recognize that, as a rule, it is contra-indicated whenever the layers of the skin are inflamed, being most useful when the epiderm is dry and improperly nourished, and of very little use when the corium is inflamed. Psoriasis is a typical disease of the former class, and in its treatment arsenic is a standard remedy. As stated above, the medicine should not be prescribed during the inflammatory stage of a skin disease. When used, it should be kept up for weeks, even months. As a result of the constant employment of arsenic when it ought not to be used, we see cases where great damage is done by its too-free administration. We must also remember that the drug given in large doses is capable of producing some renal irritation as well as irritation of the stomach and intestines, and that a condition of irritability of the mucous membranes of the body generally are sometimes caused by too large a dose. Dr. Hare calls our attention to the use of arsenic as a valuable appetizer in doses of a minim of Fowler's solution with ten grains of bicarbonate soda and a tablespoonful of infusion of genitan taken before meals. I have used it this way and certainly found it a very valuable tonic. It is also useful in certain forms of morning diarrhoea and nausea; also it

is valuable in the treatment of various forms of anaemia, in which case it must be given over long periods.

It is hardly necessary to remind you that it is almost a specific in the treatment of chorea, and its value as a blood tonic in malaria, and its great value in diabetes and asthma. It is held by Murray and others that it is useful in those asthmatic cases which are young, and the old with marked emphysema. It is also valuable in cases that have nasal disorders due to hyperemia of the respiratory mucous membrane. While recognizing the value of arsenic, we must not forget that it is possible for it to produce evil influences; that it is capable, when administered too long a time in large doses, of causing pigmentation of the skin, irritation of the stomach and of the respiratory tract, and, more serious still, peripheral neuritis.

In the treatment of chorea I find it of the greatest value. You must use it in increasing doses, and this is one of the few diseases in which arsenic is so valuable that you have to give it in ascending doses, even to tolerance. I find it of the greatest value in anemia; even the obstinate and often incurable cases of pernicious anemia yield better to arsenic than to any other known remedy; it is to be given in small doses and kept up for months. In the small dose you are not so likely to produce stomach disturbances. The effect of the drug in this disease is not due to its increasing the number and quality of the red blood corpuscles, but rather to its preventing or delaying their destruction in the portal circulation. By timely use of laxatives and careful watching the dosage you may easily adjust the blood-making forces.

Dysmenorrhoea, frequently noticed in women with a tendency to asthma or subject to chronic skin diseases, is often cured or benefited by arsenic.

Arsenic ranks next to quinine in treatment of malaria; for instance, chronic cases, where quinine has lost its power, are markedly benefited by arsenic.

Neuralgic headaches and anaemia of malarial origin are very amenable to the drug. Fowler first reported the remarkable efficiency of arsenic in neuralgia of the intercostal and fifth pair of nerves.

It is equally as valuable in these cases, whether the disease be due to malaria or general debility. I have frequently gotten very good results in pulmonary phthisis, especially in those cases where there is excessive expectoration and slow degenerative processes. The good effect of the arsenic is shown by the rapid improvement of their general condition, there being a lesser pulmonary secretion, a general improvement in the appetite, and increase

in the body weight. It is contra-indicated in phthisis where the cough is hoarse and paroxysmal, with but scanty secretions and tendency to hemorrhage. When I want to improve the nutrition of my patients I find it the most valuable of tonics. It has not the power of increasing red blood cells, but it stops the destruction of the cell and thereby shows its great influence on the general nutrition. I do not know of any tonic that we can expect to give us better results than arsenic when administered in the proper way. In regard to the preparation used, it is just a matter of preference. I find Fowler's solution to be the most useful in a general way, and use this preparation more than any other. I believe that failure follows so many because they do not persist in its use for a long time. —P. C. Simpson, M. D., in *Am. Practitioner*.

TREATMENT OF CERTAIN FORMS OF CANCER BY THE X-RAY.

Williams (*Jour. Amer. Med. Ass'n.*, September 14, 1901) divides cancers, from the standpoint of X-ray treatment, into internal and external forms, of which he discusses only the latter class in regard to the therapeutic effect of the X-ray. This class includes epidermoid cancers, typical epitheliomas and rodent ulcers, "and also cases which had the clinical appearance of beginning cancers, but which, under the microscope, were found to be plasmas, or simple cases of ulceration and necrosis," . . . situated particularly about the face and hands. They are the forms that have been amenable, in a measure, to other therapeutic proceedings, but the present method has the advantage of painlessness, harmlessness, and that it yields good cosmetic effects. Great care is to be taken to prevent X-ray burns. The advantages of this new method are: "The treatment causes no pain; healing is produced without creating a burn; some cases improve after a few sittings without further renewal of treatment; the treatment can be carried on without interfering with the work of the patient."

OXYGEN AND STEAM WITH THE VAPOURS OF A SPECIAL INHALATION MIXTURE IN PULMONARY DISEASES.

Penrose (*Johns Hopkins Hosp. Bull.*, November, 1900) advocates the use in catarrhal affections of the nose, pharynx, larynx, in grip, chronic bronchitis and pulmonary tuberculosis with secondary infection, of steam or oxygen, or both, which has been passed through a mixture of creosote, turpentine and compound tincture of benzoin in a

pint of boiling water. He details a case of tuberculosis with beginning cavity formation in which the sputum decreased rapidly and pus organisms disappeared entirely within a few weeks. Patient gained weight, and the tubercle bacilli disappeared after three months of the inhalation treatment; another case, one of purulent bronchitis, in which the sputum and the pus organisms rapidly disappeared and the cough ceased; finally a case of chronic infantile purulent bronchitis, which yielded rapidly, and permitted a rapid development of the child.

The method may be applied by passing oxygen or steam through the mixture, utilizing a "Benzoin Inhaler" or "Hynson and Westcott Inhaler," or, more simply and less expensively, especially for home use, by inhaling the fumes as they rise from the boiling water. To be effective, inhalations should be of ten to fifteen minutes' duration, and taken systematically three or four times a day. To begin with the following formula is used:

R. Creosote (Beechwood).....
 Olei terebinthinæ.....aa ʒ iv
 Tr. benzoini co.....ʒ iij

M. Sig.—Dram of this mixture to a pint of boiling water.

A greater proportion of creosote and oil of turpentine may gradually be added until finally the formula contains equal parts of each ingredient.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College; Assistant Surgeon, Western Hospital;

AND

GEORGE FISK, M.D.,

Instructor in Surgery, University of Bishop's College; Assistant Surgeon, Western Hospital.

A NEW METHOD FOR THE RADICAL CURE OF HYDROCELE OF THE TUNICA VAGINALIS TESTIS.

The method herein described of evacuation of the sac and subsequent inversion of it is by no means a new one. Looking over the literature of the subject we see that it was first proposed some ten years ago by Vautrin, of Nancy. The French surgeons have used it largely, and in that country it is called Longuet's operation. Of late it has been introduced into Germany, where it goes by the

name of Winkelman's operation. The author makes a transverse incision on the affected side, and the sac is defined and incised longitudinally. The fluid is evacuated and the cavity irrigated with sterile water or a bichloride solution. The testicle and collapsed sac are now drawn through the skin incision, the sac split from top to bottom and turned inside out, the edges being stitched in their new position by a few catgut sutures. The testicle and tunica are returned to the scrotum, so now the entire serous surface of the tunica vaginalis proper is in apposition with the loose connective tissue of the tunica vaginalis, with which it very shortly fuses. The testicle now lies between the tunica and scrotal wall. The skin wound is closed in the usual fashion. Usually the testicle is dislocated upward as a result of the operation. The sac in its new position is unable to secrete, and speedily atrophies. The operation commends itself for its simplicity, lack of hemorrhage, freedom from complications and attainment of a radical cure. Conclusions cannot yet be drawn as to whether it causes any changes in the testicular function—P. H. Lewis, M. D., *Therapeutic Gazette*.

PERFORATION IN TYPHOID FEVER FROM AN OPERATIVE STANDPOINT.

Davis (*Amer. Jour. Surg. and Gynec.*) says: The diagnosis of perforation is not always easy. A decided and sudden increase, especially of pain, in the abdominal symptoms, associated with an abrupt fall of temperature, is diagnostic of perforation. Leucocytosis is a confirmatory sign. Hemorrhage is accompanied with a sudden fall of temperature, but not by a sudden increase of abdominal symptoms. Dullness in the right iliac region is not to be expected in cases of perforation. Localized impairment of resonance may be due to free abdominal fluid; change of position causes it to disappear. Localized pain and dullness may be due to a plastic peritonitis around the site of perforation. This may be observed perhaps in one case in ten, possibly one in five. It is impossible to recognize that a perforation is about to occur. It is not necessary to operate before a perforation occurs, but it is necessary to operate before collapse is marked. Typhoid fever patients when not in total collapse bear operation much better than was formerly expected. Patients operated on in marked collapse are liable to die on the table. I know of some such cases. Washing out the abdominal cavity with hot normal salt solution, even if no perforation is present, seems to improve the condition of the patient at the time of

operation, and to favourably influence the subsequent course of the disease. Operate as soon as the diagnosis of perforation is made. It is less dangerous for the patient to run the risk of having an operation done during the first period of depression than to wait and run the risk of having collapse preclude all operative measures. In operating, incise as for appendicitis, and not in the median or semilunar line.—*Memphis Medical Monthly*.

THE USE OF NORMAL SALT SOLUTION.

John G. Clark (Progressive Medicine) says the more extensive one's experience becomes in the use of normal salt solution as a stimulant in abdominal operations, the more convincing is the evidence of the benefits to be obtained by its use. During the past four years he has made it a practice to leave at least one liter in the peritoneal cavity, after even the simplest operations. It increases the volume of the blood, lessens its specific gravity, stimulates the cardiac ganglia and accelerates the circulation. The skin, kidneys and intestines are stimulated, and all the organs of the body functionate better under its influence. The number of red blood corpuscles is distinctly increased. Its special use in abdominal cases is to prevent shock, to lessen the effects of hemorrhage and decrease the virulence of infection. Next to the Trendelenburg posture, the author regards the introduction of the normal salt solution as one of the greatest benefits which have been conferred upon modern surgery in the last five years. Its most marked advantages are claimed to be a lessening of the thirst and an increase in the urinary excretion. Drainage from the peritoneal cavity the author regards as a problematic benefit, because of the rapidity with which absorption takes place by the lymphatics and peritoneum. In these cases he employs an infusion of large quantities of normal salt solution combined with the elevated dorsal posture. In moribund patients he has seen a marvellous stimulation from this treatment, which safely tided them over the critical period. Submammary infusions are quite as beneficial; they act almost as rapidly as intravenous transfusions, and are devoid of some of the complications which attend the latter. The writer's plan is to leave at least one or two quarts of salt solution in the abdominal cavity after every abdominal operation, and in addition to this a quart may be given beneath the mammary glands, in case the patient shows immediate shock. As a routine practice in all operations, either minor or major, one or two liters of salt solution is given per rectum for the purpose of alleviating thirst.—*Medicine*.

TREATMENT OF SIMPLE FRACTURES.

Bennett (British Medical Journal) concludes a discussion of this question as follows:

1. The treatment of simple fractures at present, although less stereotyped than hitherto, is still conducted generally too much upon lines which are traditional rather than rational.

2. The use of splints for long periods is disadvantageous, especially in the form of irremovable appliances, such as plaster of Paris and the like.

3. Speaking generally, the earlier movements of the joints above and below the fracture in a long bone are used the shorter is the time occupied in recovery.

4. The legitimate scope of the operative treatment of simple fracture is limited, and should be confined to (a) cases which are otherwise unmanageable; (b) special cases, such, for example, as certain spiral and oblique fractures, mainly of the tibia; and (c) certain fractures near joints in adults, notably of the humerus at the elbow.

5. The operative treatment of recent fracture of the patella is by no means so generally satisfactory or so free from risk as published cases would tend to show; and further, in cases in which the separation of the fragments does not exceed half or even three-quarters of an inch, as good results for practical purposes are usually obtainable without operation, although less rapidly.

6. The use of massage and passive movements immediately in simple fracture when the circumstances of the patient and of the practitioner admit of it, either in its entirety or with modifications, is, in the majority of cases, the best means of effecting a rapid and useful recovery.

7. The tendency of late has been to exaggerate the degree of disability and diminution in wage-earning capacity following upon simple fractures.

8. Although no pains should be spared in obtaining perfect position of the fractured ends, moderate displacement, provided it is not rotary, is not necessarily followed by any disability if care be taken by the use of early movements to prevent any matting of the parts around the fracture; in other words, the disability which follows in certain cases in which the position of the united fragments is not ideal is due, not to the bony deformity, but to the adhesion of the soft parts around, which is easily preventable.

9. Having regard to the unavoidable modifications which must be dictated by the circumstances, social and otherwise, of the patient, and by the facilities possessed by the practitioner, no one method of treatment for simple fractures can be insisted upon for routine use, even in cases in which the local conditions are precisely alike.—*Medical Standard.*

Therapeutic Notes.

BRONCHITIS.

R Perpinol.
 Sodii Benzoatis..... aa gr. 2
 Sach alb.....q. s.

M. at ft. pil No. i. Take six to 12 daily.

NIGHT SWEATS OF PHTHISIS.

R Agaricin..... gr. $7\frac{1}{2}$
 Dwen Powder..... dr. 2
 Powd. Marshmallow.
 Mucilage of acacia.....aa dr. i

M. Div. in pil No. c. One or two pills at night.

TREATMENT OF ACUTE ALBUMINURIA AFTER SCARLET FEVER.

The following is recommended by Otto Maier, in the *Post Graduate* :—

R Pilocarpin hydrochlor.....	gr. i	06
Infusion digitalis.....	ʒiii 96	

M. Sig. :—One teaspoonful every three hours.

He also recommends that a hot bath be given daily and a diet consisting of milk and ice cream. To promote alimination by the bowels, gives the following :—

R Hydrarg. chloridi mitis.....	gr. iiss	15
Pul. jalapae.....	gr. ivss.	

M. Ft. chart. No. i. Sig. :—One such to be taken twice a week.—*Journ. of the American Med. Assn.*

R Heroin..... gr. $\frac{1}{16}$
 Ammon Hopophos..... gr. 3
 Hyoscyami..... gr. i
 Pin Alb Corb..... gr. $3\frac{1}{2}$
 Bols Toluban..... gr. $\frac{1}{4}$
 Glycerini puri..... dr. i

For each dose.

Jottings.

Salicylic acid in a salve applied to developing boils will abort them.

Strong, hot coffee will quickly overcome uterine inertia if drank freely.

Sulphur in an ointment applied just within the anus is said to rapidly destroy pinworms.

A 1-20 solution of potassium permanganate is powerfully effective in toothache.

Pyrogallic acid, fifteen grains, in one ounce of colodion will cure ringworm very speedily wherever located.

Nitroglycerine has a wonderful effect in postpartum hemorrhage ; it is also excellent in vomiting of a reflex character.

Sodium phosphate increases the functional activity of the liver and stimulates the glandular organs concerned in digestion.

For diarrhoea with large watery movements with sharp, spasmodic, colicky pains, the arsenite of copper is a good remedy.

For tapeworm give eight grains of salicylic acid every hour until five or six doses have been taken, then give a good, big dose of castor oil.

In spasmodic stricture of the urethra, in spasms of the ureter, in spasms, or in the tenesmus of dysentery, we have no remedy superior to full doses of gelsemium.

Hair-cap moss (*Polytrichum*) it is claimed is of benefit in ascites or anasarca. It largely increases the urinary secretion and reduces the weight of the body within a few days.

A lotion prepared by dissolving one grain of the bichloride of mercury in four ounces of the peroxide of hydrogen is said to be a most excellent topical application in the treatment of diphtheria.

In the treatment of orchitis, first treat the temperature ; second, administer *phytolacca* for its specific influence ; and third, assist in general elimination by administering an occasional dose of acetate of potassium.

The date at which the rashes appear in the various diseases is as below :—Typhoid fever, seventh to ninth day ; typhus fever, fourth or fifth day ; smallpox, third or fourth day ; measles, third or fourth day ; scarlatina, first or second day.

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Editorial.

WESTERN GENERAL HOSPITAL, MONTREAL.

The Western Hospital has had a somewhat varied history. In 1873 a gentleman from the Southern States, named Major Mills, who had resided in Canada for about ten years, donated \$12,000 to erect a wing to be used as a Western General Hospital. Through the exertion of two or three gentlemen there was collected, towards the purchase of land, about \$40,000. The ground first purchased formed the corner of Mountain and Osborne Streets. It was soon felt that this site was not sufficiently far West, and that it was not large enough. It was, therefore, sold, and a property about half a mile or so further west was secured. This consisted of about 82,000 square feet and is bounded by four streets, and on one side has a fairly large public square. Those who at that period took a deep interest in the hospital scheme considered the site unique for a hospital building, and events have proved their wisdom. Atwater avenue, a very wide street, leads directly to it, from a lower section of the city in which manufactories have greatly multiplied within the last few years. In 1874 an Act of Incorporation

was obtained, and in 1876 Major Mills began the erection of his building. Owing to a variety of events, this building was not fully completed and ready for occupation till about 1880. During this period great depression had fallen upon Montreal, and the friends of the institution also found that a strong opposition had developed from a quarter which they had not anticipated. The result was that the Western Hospital Corporation did not consider the time opportune for opening it, especially as its completion by Major Mills made it his property to do with it what he pleased till he had recouped himself for the additional sum, above his original subscription, expended in finishing the building. The Women's Hospital, the charter of which was purchased by the Medical Faculty of Bishop's College, and which was in operation in small quarters, offered to lease the new Western building from Major Mills. Their offer was accepted and the Women's Hospital took possession and opened Maternity and Gynaecological departments. For about ten years this Faculty conducted therein the most successful Women's Hospital in Canada, and were able to supply their students with maternity cases, so numerous as to make them the envied of the students of all other medical schools in Canada. In 1894 they moved out of the Western Hospital and are now in possession of a building, which still enables them to supply almost unlimited midwifery cases for their students. This exodus of the Women's Hospital enabled the Western Hospital Corporation to open the building, now their property, as a General Hospital. In the twenty years which had elapsed since its incorporation death had carried away many of its early and warm supporters—others who remained threw themselves actively into the work. But the work required for a General Hospital was found so arduous that the early friends, who remained, found the task an uphill one, and looked for younger blood to assist them. Why this was not forthcoming it is perhaps best not to say; but it was not forthcoming, and the result was, that although much good work was done in the Hospital, debt accumulated rapidly. With accumulating debt the friends began to lose

interest—bad health deprived the Hospital of several of its best collectors, and meetings of the Committee could only be had at long intervals. Such a state of things, if allowed to continue, could have but one end, that is closing of the Hospital. Fortunately, a few staunch friends still remained, and these determined to make an effort to place the Hospital under a new organization. The gentleman who, for a number of years, had filled the office of President was most anxious to resign, and it was felt that if a gentleman, possessing power of organization, and other qualifications essential in a Hospital President, could be obtained, the first step in a successful reorganization would be secured. Happily, this was done by inducing Alderman C. F. Smith to accept the Presidency. He has done wonders in placing the Hospital in a better condition than it has ever been, and the work now done within its walls is not excelled by any hospital in Montreal. He has surrounded himself with an active and energetic Committee of Management, who meet regularly every week. The Hospital has a Medical Superintendent and a Lady Superintendent, who, under the medical staff, has charge of one of the best training schools for nurses in the city. The debt has been reduced by several thousands of dollars, and the yearly receipts are equal to the yearly expenditure. Nearly fifty new governors have been obtained during the last year and a half, and scarcely a week passes without one or two of Montreal's well-known citizens qualifying for this position. In fact the aspect of everything is changed for the better. This was well indicated at the annual meeting of the governors which was held on the 21st of January, when the attendance was the largest in the history of the Hospital, and great interest was evinced in the proceedings. The Secretary in his report made allusion to an offer discussed at the last quarterly meeting of the governors, for the purchase of a portion of the Hospital ground. This had been voted down by a large majority as it was felt it would all be necessary for hospital purposes in the near future. The Governors in rotation had visited the Hospital weekly, and in many in-

stances it had proved an agreeable surprise to learn the good work it was doing. Their appreciation of this was shown by many specially contributing toward some of the most urgent needs of the institution. The financial condition was considered most satisfactory, considering it only represented a hospital year of seven and a half months. This was caused by the decision of the previous annual meeting to have the hospital year run concurrent with the actual year. The receipts from subscriptions and donations average \$432 per month as compared with \$244 per month the preceding year. The medical report, which was read by Dr. Fisk, Medical Secretary, showed marked increase in both the Outdoor department and the Indoor department. The attendance at the former had been increased from a daily average attendance in 1900 of 11.02 to 15.95 in 1901. The increase of intern patients for the year was 33 per cent. The report was fully discussed, and was considered eminently a satisfactory one. Mr. G. B. Burland spoke encouragingly of the work which was being done under most adverse circumstances. He considered the present building unfit for a modern hospital—a new one was a necessity. He would be one of ten to erect an up-to-date building costing \$100,000, which he thought would build such a one—but, if not, he would be one of the same number to erect one costing \$200,000. This announcement was received with great applause. Subsequently, four gentlemen intimated that they would join a party of twenty to wipe out the debt of the Hospital. Both these offers were referred to the incoming Committee of Management. Altogether, the stock, so to speak, of the Western Hospital, was never so high as it is to-day. This has resulted from two causes:—1st, the evident need of such an institution in the rapidly growing Western part of Montreal, and, 2nd, the opening of its private wards to all reputable physicians, quite independent of their being in any way connected with the Hospital. Many of our readers we know have special interest in this Hospital and will be pleased to hear of its bright prospects.

JEFFREY HALE HOSPITAL, QUEBEC.

The annual meeting of this Hospital was held on the 16th of January, when the reports of the Secretary and the Treasurer were read. Both of these are of a most satisfactory character. During the year 359 patients were admitted, of whom 24 died. The report states that the new Hospital had been completed during the year and was now fully equipped and in use. The building for contagious patients is also finished and is ready for use. The Lady Superintendent is Miss Blakie, a graduate of the Montreal General Hospital training school, and the House Surgeon is Dr. Stevenson. The Treasurer's report shows that the receipts from all sources were \$73,750.51. This includes a donation of \$25,000 and one year's interest on same of \$1,250, a total of \$26,250, also \$1,500 from Father O'Leary. Donations and subscriptions were \$3,265. Interest on invested funds, \$5,914.10, and on deposits, \$622.73. The cost of the Hospital during the year was \$13,140.45. There was disbursed to contractors and architects for construction, \$33,400. There was invested \$10,000, and there is a cash balance on hand of \$17,210.05. This report is a satisfactory one, but only a general summary is given. A more detailed report will doubtless be published shortly, and will be of deep interest to all who are engaged in hospital work.

We had the pleasure of visiting this Hospital last September, in company with a friend who takes a very deep interest in it. We were more than pleased with what we saw. Indeed, in many ways it was a revelation to us. Every possible convenience is in evidence, and we are of opinion that Quebec has reason to be proud of its Jeffrey Hale Hospital. Its situation is most desirable, and the view from its windows and galleries simply magnificent and not to be excelled anywhere. If scenery and splendid air contribute to recovery, as we believe they do, then the death rate of this Hospital ought to be small.

THE ROYAL VICTORIA HOSPITAL.

The annual meeting of the governors of the Royal Victoria Hospital was held on the 21st of January. This institution, as our readers are doubtless aware, is endowed and receives but little support from the outside public. The ground on which it is built was purchased, the buildings erected, and the Hospital endowed by Lord Strathcona and Mount Royal and Lord Mount Stephen. A few thousand dollars were contributed toward the object by outsiders, but practically it is as stated. Patients are admitted from every part of the Dominion on terms similar to those enjoyed by residents of Montreal. The city gave a piece of land on which to build the Hospital, but, owing to circumstances needless to recall, it was placed on adjoining land. The original site is used as breathing space. From the report of the Secretary we learn that during the year 1901 2,579 patients were admitted, of these 1,605 were Protestants, 879 Roman Catholics, 68 Jews and 27 of other faiths; 1,254 were free patients, 904 public ward patients paying 50 cents a day; 421 private ward patients; 1856 were residents of Montreal and 723 were from districts outside of Montreal. The death rate for the year was 4.42 or 3.54, deducting those who died within forty-eight hours after entering the Hospital. In the out-patient department the number treated was 3,601. The number of visits of these patients was 18,906. The income for the year was \$130,738.40, while the ordinary expenditure was \$112,280.20, the balance being applied towards the cost of the new power house and isolation pavilion. Already in many ways the magnificent buildings and annexes are being found inadequate. Plans are being prepared for needed extensions and improvements in operating theatre. Mr. R. B. Angus was re-elected President. Many of the governors hold office on account of the public positions which they hold. For instance, the Mayor of Montreal, the President and Manager of the Canadian Pacific, the Manager of the Grand Trunk Railway, President of the Board of Trade, are governors in virtue of the

office. The Royal Victoria Hospital is excelled by few hospitals in the world. It will forever be a magnificent monument to the liberality and public spirit of its most generous donors.

Dr. Laphorn Smith, of Montreal, has received a letter from Professor Pestalozza, of Florence, on behalf of the Committee of Organization of the Fourth International Congress of Gynaecology, begging him to announce to the Profession of Canada that the Congress will meet in Rome from the 15th to the 21st of September of this year. The Committee of Organization consists of Professors Pasquali, Morosani and Mangiagelli, who wish to extend a hearty welcome to their Canadian brethren. The subscription fee is five dollars for gentlemen and two dollars for the ladies accompanying them. The Treasurer is Dr. La Torre, 8 Via Venti Settembre, Rome. The subjects chosen for discussion are:—1. The medical indications for the induction of labour. 2. Genital tuberculosis. 3. Hysterectomy in puerperal septicaemia. 4. Inflammatory changes in the neck of the uterus. 5. The surgical treatment of cancer of the uterus.

It is the earnest wish of the Committee to have a large attendance of Gynaecologists and Obstetricians from Canada.

Dr. James Patterson, who had charge of a large outbreak of smallpox, numbering 1,500 cases, in the west of Canada, reports that the disease was most prevalent among the unvaccinated French half-breeds; was less prevalent among the Indians, who were fairly well vaccinated, and did not appear at all among the Dhoukobor and Gallician villages, whose inhabitants had all been vaccinated in childhood, and revaccinated on board ship before entering the country.

Personals.

Dr. Robillard (McGill 1860) has resigned his position as Medical Health Officer for the City of Ottawa, Ont.

Dr. Albert A. Macdonald, of Toronto, has commenced to use an automobile in making his visits. The Doctor pronounces it a distinct success and says that he can at least save an hour in his afternoon work alone.

Dr. Francis J. E. Tetreault (M. D., Bishop's, 1880), of Orange, New Jersey, United States, was, on the 17th of January, elected President of the Orange Mountain Medical Society. We congratulate Dr. Tetreault on this manifestation of the high regard in which he is held by his confreres.

Dr. Douglas Macrae (M. D., Bishop's, 1893), who has been for several years Surgeon on the Red Star Line of Steamships sailing between Philadelphia and Liverpool was in Montreal during January last.

Dr. Tutill (M. D. Bishop's, 1901), has been appointed one of the House Surgeons of the Western General Hospital in place of Dr. Baird resigned owing to ill health. Dr. Tutill entered upon his duties early last January. He had previously served nine months as House Surgeon of the Women's Hospital.

Dr. Charles A. Hebbert, M. R. C. P., of London, has been elected Professor of Anatomy in the Medical Faculty of Bishop's College. He has for several years been Lecturer on the subject at this College and previously held a similar appointment at the Westminster Hospital Medical School, London, England. Dr. Hebbert is an exceptionally good teacher, and is not engaged in general practice, devoting himself to consultations in medico-legal cases, in which he is an expert.

Book Reviews.

The Four Epochs of Woman's Life. A study in Hygiene, by Anna M. Galbraith, M.D., Author of "Hygiene and Physical Culture for Women;" Fellow of the New York Academy of Medicine, etc. With an Introductory Note by

John H. Musser, M.D., Professor of Clinical Medicine, University of Pennsylvania. 12 mo volume of 200 pages. Philadelphia and London, W. B. Saunders & Company, 1901. Cloth, \$1.25, net. Carveth & Co., Toronto, Canadian agents.

Women have at last awakened to a sense of the penalties they have paid for their ignorance of those laws of nature which govern their physical being, and to feel keenly the necessity for instruction in the fundamental principles which underlie the epochs of their lives.

This is pre eminently the day of preventive medicine. The physician who can prevent the origin of disease is a greater benefactor than he who can lessen the mortality or suffering after the disease has occurred. Any contribution, therefore, to the physical, and hence the mental, perfection of woman should be welcome alike by her own sex, by the thoughtful citizen, by the political economist and by the hygienist.

In this instructive work are stated, in a modest, pleasing and conclusive manner, those truths of which every woman should have a thorough knowledge. Written as it is for the laity, the subject is discussed in clear, comprehensible language, readily grasped even by those most unfamiliar with medical subjects. A valuable and commendable feature of this handy volume of instructive information is a comprehensive glossary of those medical terms necessary to a thorough understanding of the subject under discussion. Without doubt, it is a book that should receive the thoughtful consideration of every woman.

F. W. C.

A Text-Book of Pharmacology, and some allied sciences (Therapeutics, Materia Medica, Pharmacy, Prescription-Writing, Toxicology, etc.), by Torald Sollman, M.D., Assistant Professor of Pharmacology in the Medical Department of Western Reserve University, Cleveland, Ohio. Illustrated. W. B. Saunders & Co., Philadelphia; Carveth & Co, Toronto, 1901, \$3.75.

It is seldom a volume is issued by one author aiming to cover as much ground as is attempted in the book under review. I say attempted, advisedly, because in the 894 pages in the book the field of pharmacy, pharmacognosy, pharmacology, therapeutics, toxicology and experimental pharmacology have been brought under observation with varying degrees of completeness, so that it is rather more than a text-book and something less than a system; with the exception of Part I, dealing with the preparation and prescribing of medicine and toxicologic analysis, and Parts III (practical exercises in chemistry and experiments on animals), and IV (methods of analyzing the cause of pharmacological action), The book appeals to one as more of a teacher's or graduate's book than one fitted for the student; because the condensation essential to keeping the volume within bounds necessarily induces to a terseness and a dogmaticism of style that is foreign to the fuller scientific discussion of, as yet, undecided questions in pharmacology, and they are many

—while it pre-supposes a prior knowledge that is not necessarily possessed by the student, and, unfortunately, often not by the graduate. The question of immunity, for example, as discussed by the late Kanthak and by the author, will serve to show my meaning. The author has condensed into some seven pages a subject worthy of a monograph. The judicious use of display type, however, has enabled him to work to good advantage, and on the whole the work will be very acceptable to the teacher, and parts of it to the student. In common with most teachers of the English school, I deprecate the attempt to cover too wide a field at one sitting and prefer the more careful (if slower), process of spading and sowing one section thoroughly at a time. The distinction of the British pharmacopeal preparations from those of the United States, and the use of metre, as well as the usual weights and measures, is of the greatest use and marks the transition stage from arbitrary to scientific standards. The printing and binding are in Saunders' well-known style and call for no comment, while the price places it well within reach of every one.

R. W.

Saunders' Question Compends. Essentials of Physiology. Prepared especially for Students of Medicine, and arranged with questions following each chapter. By Sydney P. Budgett, M. D., Professor of Physiology, Medical Department of Washington University, St. Louis. 16 mo volume of 233 pages, illustrated. Philadelphia and London, W. B. Saunders & Company, 1901. Carveth & Co, Toronto. Cloth, \$1.00 net.

This is an entirely new work and a worthy accession to Saunders' excellent series of Question Compends. It aims to furnish material with which students may lay a broad foundation for later amplification, and to serve as an aid to an intelligent consultation of the more elaborate text-book. The subject of Physiology is covered completely, and, the author of the work being a teacher of wide experience, the salient points are particularly emphasized. An important feature is the series of well-selected questions following each chapter, summarizing what has previously been read, and at the same time serving to fix the essential facts in the mind. In every way the work is all that could be desired as a students' aid.

F. W. C.

New Remedies and Therapeutic Measures, Wainwright's, G. P. Engelhard & Company, Chicago, 1901.

The volume before me is a very welcome addition to the physician's armamentarium. As the author truthfully says in his preface (and the admission is rather humiliating) the part of the physician's practice with which he is least familiar is pharmacology, and equally apt is his statement that the average general practitioner has not

the time to read the reports of the never ending list of new synthetic drugs placed on the market appearing in the various journals. While the vast majority of these new compounds sink into perhaps a well-merited oblivion, there are always a few that stand the test of time and experience. It is to cull these for the benefit of the busy practitioner that Mr. Wainwright has issued his booklet, and well has he done his work. I note the omission of the cocodyls from the arsenical preparations, and adrenalin from the animal extracts, although the extract of the suprarenals is mentioned. A very welcome addition, and one which may be profitably extended in the next edition, is the department of newer therapeutics—excellent articles, models of condensation, appearing as the Nauheim treatment of heart diseases, general, regional and local anæsthesia both by Schleich and spinal methods. The notes on Nirvanin deserve the consideration of those enthusiasts of the spinal method of anæsthesia. The volume contains 224 pages of printed matter, in clear type, on dull-finished paper, deckled edge, gilt top, and is a credit to the bookmaker. It should be on the desk of every physician.

R. W.

A Text-Book of Pharmacology and Therapeutics, or the action of drugs in health and diseases, by Arthur R. Cushing, M.A., M.D. (Aberdeen), Professor of Pharmacology and Therapeutics in the University of Michigan—second edition revised and enlarged, 47 engravings. Lea Bros. & Co., Philadelphia and New York, 1901.

Cushing's work is too widely and favourably known to call for more than the briefest notice. The first edition of his work was fully reviewed in this journal on its appearance over a year ago—and it is gratifying alike to his friends and himself that a work "which endeavours to explain the *reason* for drug action and to "offer a corrected and rational body of knowledge concerning "Therapeutics" has met with the measure of success it deserves. The last edition contains a few new articles and some necessary corrections of clerical errors. Not the least pleasing feature of the book is its literary style, a form of writing that finds perhaps its highest expression in the workings of Lauder Brunton, and which makes the reading a pleasure instead of a toil, while the bibliographic index at the end of the sections is valuable to those wishing to delve deeper into any subject than could, of necessity be expected in a text-book of its avowed objects.

R. W.

Venereal Diseases. A Manual for Students and Practitioners, by James R. Hayden, M.D. Third and revised edition. Lea Bros. & Co., publishers, Philadelphia, 1902.

Much of the text of this edition has been re-written and many new illustrations added. New sections on Vegetations and Herpes have appeared for the first time and are certainly a valuable addi-

tion. The arrangement, printing, illustrations and general make-up of the book is excellent. The text is very concise and not too short to be clear. Much practical advice is noticed throughout, and conflicting theories are conspicuous by their absence.

A very sensible section is that on the care of urethral instruments. The note of warning that too zealous sterilizing often renders the instruments rough and harmful to the patient may well be remembered.

Students will find this work very useful, and the busy practitioner may review the subject without loss of time in reading this book.

G. F.

A Text-Book of the Practice of Medicine. By James M. Anders, M.D., Ph.D., LL.D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College of Philadelphia, Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia. W. B. Saunders & Co., Philadelphia and London, 1901; J. A. Carveth & Co., Toronto, Canadian Agents.

We have in this volume the fifth edition of a valuable and useful treatise on the Practice of Medicine. It has been carefully revised and brought into harmony with the most recent development in practical medicine. Differential diagnosis and treatment have been especially well worked out. The bacteriology of the book is up to date.

The volume consists of over twelve hundred pages and is divided into eleven parts. Infectious diseases, constitutional diseases, diseases of the blood and ductless glands, diseases of the respiratory system, diseases of the digestive system, diseases of the urinary system, diseases of the nervous system, diseases of the muscles, the intoxications, obesity and heat stroke, animal parasitic diseases. In the present edition extensive changes have been made in the infectious diseases, bringing the subject up to the most modern ideas. A few new articles have been introduced—fatty infiltration of the heart, streptococcus, pneumonia and acute diffuse interstitial nephritis.

This volume represents a very large amount of well classified labour. It is replete with useful information. Its worth is such that it should be in the hands of every student and worker in the realm of general medicine.

W. G. S.

The Medical News Pocket Formulary for 1902. By E. Reim Thornton, M.D. Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. Fourth edition, revised. Lea Bros. & Co., Philadelphia and New York, 287 pages, wallet size, leather bound, with pocket and pencil, \$1.50 net.

That this little pocket *vade-mecum* should have reached its fourth edition must be a source of gratification to its author who

has succeeded in getting together some 1,700 formulæ for the different conditions and ills to which the flesh is heir. It may be said of this volume as was once said of a certain story, "To those who like that sort of thing it is just the sort of thing they would like," and doubtlessly it fills a want in a certain field. It has always appealed to me, however, that its very existence is a reflection on the teaching of any university whose graduates find they need it. That there is need for it, this fourth edition bears mute but forcible testimony. When will our universities insist on the vast importance of Pharmacology and Therapeutics in qualifications of a graduate in Medicine.

R. W.

A Brief Manual of Prescription Writing in Latin or English for the use of Physicians, Pharmacists and Medical and Pharmacal Students, by M. L. Neff, A.M., M.D., Cedar Rapids, Ia. Pages v-152. Size, 8 x 5¾ inches. Extra cloth 75 cents, net, delivered. Philadelphia, Pa. F. A. Davis Co., publishers, 1914-16 Cherry street.

This little volume is a compendium of his notes in teaching prescription writing. There was no need of the statement in the preface that he "disclaimed any attempt to teach the Latin language, or such"; the fact is self-evident. Just so long as the matriculation standards of certain schools of medicine are maintained at their present level, just so long will such a booklet find sale. Of its utility after purchase there is room for personal opinion. Like the Biblical description of man, it is "fearfully and wonderfully made." Latin may suffer from the stigma of a dead language, *malgré de foel*, that it is spoken as an every-day tongue by some 30,000 people on the Eastern coast of the Adriatic, but a knowledge of it does polish the mind and broaden the intellect, hence its retention as a matriculation subject for entrance to the study of Medicine—the broadest of all sciences. It is hard to see how a matriculant, passing his latin exam., should need such a help. Should he do so, however, the low price will atone. Verily, of the making of books there is no end.

R. W.

A Practical Treatise on Diseases of the Skin, by John V. Shoemaker, M.D., LL.D. Fourth edition revised and enlarged with chromogravure plates. D. Appleton & Co., New York, 1901.

This volume groups in a concise and systematic form all the essentials of dermatology; the hypographical work and engravings are very good.

This edition has been thoroughly revised and contains many important changes and additions.

The author's classification is very complete, and the formulary for internal and external treatment most useful.

J. M. J.

CANADA MEDICAL RECORD

MARCH, 1902.

Original Communications.

NOTES FROM THE CASE BOOK OF A GENERAL PRACTITIONER.

By FRANCIS W. CAMPBELL, M.D., L.R.C.P. L., D.C.L.

Dean and Professor of Medicine, Faculty of Medicine, University of Bishop's
College.

EPILEPSY.

How little we know of this disease. Theories, we have many, but they do not help us to a cure. Of its pathology, we may be said to be profoundly ignorant. Persons who have been epileptics for years die from some inter-current disease, and on *post mortem*, the brain, spinal cord and nerves are found in a healthy condition. McLane Hamilton, in his article on Epilepsy, in Pepper's System of Medicine, says: "An epileptic attack is nothing more or less than a discharge of nervous energy from an over-excited, or what may be called a dynamo pregnant nerve centre or collection of nerves." That is simply a theory, and makes no impression on my mind of any therapeutic value. Hamilton says heredity plays a most important part; fifty per cent. of his cases had hereditary history. Osler, in his last edition, says it plays but a minor role, and that French physicians, with whom he has conversed on the subject, hold the same opinion. My experience is not large but, such as it is, I endorse Hamilton's views. After repeatedly reading articles on this disease, in all our standard works on practice, I rise from their perusal, convinced that I have not learned anything of practical benefit. These articles are written by men, who, if I may say it, seem to be writing to earn their money. The

divisions and sub-divisions which they make of the disease are not met with in ordinary practice. It would seem as if they lived in a world of their own, where, possibly, because they do a large consulting practice, peculiar cases are sent to them. So far as my experience enables me to observe, and it has extended over forty years, I have not been able to diagnose any special features in the cases which have come under my observation. Practically, all have had the same symptoms, the only difference being one of degree. Until the introduction of the treatment of this disease by the bromide of potash, the unfortunate sufferer received little or no benefit from the drugs employed. The routine was the administration of anti-spasmodics, such as valerian, ether and musk. It was about fifty years ago that the bromide of potash was recommended to the profession, and, even when ten years later I entered the profession, it was the drug which apparently had given the best results. Some absolute cures were recorded. I well remember the late Dr. Waburton Begbie, of Edinburgh, telling me that one of the brightest intellects at the Scotch Bar, who had developed epilepsy in early youth, had been cured by this medicine. From that day up to the present time it has been the drug which has been prescribed in seventy-five per cent. of all cases. Bromide of sodium has, with some, taken its place, while a combination of bromide of potash, bromide of soda and bromide of ammonium, in the proportion of 1. 1. 1-2 is the favourite of a few. There are, of course, others which are recommended, such as belladonna, ergot, hydrobromic acid, nitro glycerine. But to-day the bromides are still the stand-byes of the profession in this disease, and yet I fail to learn that many absolute cures are recorded, though I freely admit that in many cases they have diminished the frequency and severity of the attacks. If they have done more. I do not know it. I have prescribed it sometimes alone and sometimes in combination with the other bromide salts, because, perhaps, to be honest, I knew no better treatment. My experience extends to about twenty-five cases; some have died from some inter-current disease (I never have had a death during a convulsion), and some

I have lost track of. At the present time I have under observation and treatment four cases, the last having been under my care only a few weeks; the other three for periods varying from forty years to ten years and two years. I bring them before the profession, because, since 1898 I have placed them on a preparation to which my attention was drawn by an advertisement in one of my "Medical Exchanges," I, being editor of the "Canada Medical Record." That preparation is Pil Ferri Hydrocyanate, and it is manufactured by the Tilden Company, of New Lebanon, N. Y. The following is its composition: R Hydrocyanate of Iron (Tilden) 60 grains, Extract of Hyoseyamis, 60 grains, Mucilage, q. s. Divide into 120 pills, one to be given night and morning, and increased one pill every three weeks, until three pills are taken at a dose. A pill double this strength is also made.

A. C. was married in 1861, at the age of 22 years. So far as I can ascertain, previous to marriage, she never had an attack of *grand mal*. She, undoubtedly, had many attacks of *petit mal*, occurring, so to speak, in clusters. They would be absent for months, and then recur, many occurring in a day, and then disappear again. Her husband did not know this at the time of his marriage, nor for some time after. It was not till the spring of 1862 that she became pregnant, and in August, when quickening occurred, she was one night seized with a severe convulsion. I saw her immediately, and recognized at once its character, that of a severe epileptic fit. It was at this time I discovered the patient's history, as I have briefly stated it. I also learned that she had been wet nursed by one who had had, at long intervals epileptic attacks, and whose son had developed the disease. From this onward she had occasional attacks, but went to her full period, and was delivered of a healthy child. She also made a good convalescence, and her baby was nursed by a healthy wet nurse. The treatment adopted was 15 grains of bromide of potash three times a day, with a half drachm at bed-time. It is needless to give minutely the history of this case, extending over so many years. Briefly, however, it is as follows: She subsequently bore

three children at full term, all of whom are alive and in good health. She also was delivered of three children, about the seventh month, all of whom died within a few days of birth. During the interval between the first attack and the year 1875, a period of some thirteen years, she had severe attacks, generally about the menstrual period, and they invariably occurred at night. An attack during the day only took place two three times during that period. This fact enabled her to move about freely, going to church, social gatherings, etc., and did not necessitate a companion being with her. The night attacks varied in severity, but, generally, were very severe, indicated constantly by minute extravasations after a fit, over the face, down the side of the neck and encroaching on to the upper part of the chest. On one occasion, during the fit, she got the heel of the left foot over the nail of the right big toe, and forced it so loose, that it was the following day removed by Dr. Roddick. She visited Scotland several times and consulted eminent men, who made no change in treatment, beyond increasing the dose to 20 grains three times a day, and 40 grains at bed-time. Special attention was directed to be given the bowels, so as to have one good motion daily. She, up to this time, had taken the bromide very regularly, but her intellect and spirits continued perfect. In 1875 there gradually developed a singular change, the night seizures took place at longer intervals, and day seizures took their place, until 1880, during which year no night seizures occurred, and day seizures alone occurred. It had been rare for more than two fits to take place on the same night, but four and five seizures during the day was now common. This was a serious change for the patient and her friends, and necessitated the employment of a companion to be constantly with her. It prevented her going to evening amusements, or for walking out, except after a week succeeding a fit, when this was permitted for two weeks. During this time the chances were against the patient having an attack, as there was generally about a month between the fits. As a matter of fact, during several years, only one severe attack and

two or three slight ones occurred, while the patient was thus allowed out. At this time a change was made in the treatment—that is in the autumn of 1883. The patient was placed on one drop of a one per cent. solution of nitro glycerine in a teaspoonful of water, 3 times a day after meals. Bromide of soda was now given instead of potash, in a 20 grain dose, morning and evening. The nitro glycerine was increased gradually, till in six months, five drops were taken. Within six months of commencing the nitro glycerine there was evidence of its doing good; the frequency of the attacks were diminished, two months elapsing between attacks, and their severity was less. Twice four months elapsed during 1888 and 1889 without a fit, and the patient and her friends were most hopeful. But in 1890 the attacks were more frequent, and the patient was discouraged. Still the nitro glycerine was continued, and once more in 1891 the attacks, though hardly less frequent, were certainly again less severe, and she seldom had more than one fit on the same day. During the time intervening between 1892 and 1897, the bromide of soda was discontinued, and a mixture of bromide of potash and sodium, with bicarbonate of potash and tincture of columba substituted. The nitro glycerine was continued at intervals, though not regularly, as the patient's stomach began to rebel and show a certain amount of irritation. In November, 1897, my attention was accidentally drawn to the benefit said to be derived in this disease from a pill of the hydrocyanate of iron, manufactured by the Tilden Company of New Lebanon, N. Y. I sent for some literature on this subject, and in January of 1898, I placed the patient on this pill, the composition of which I have already given.

Within four months from commencing this remedy, a decided improvement was noticed. The patient had, during this time only two attacks, and they were decidedly less severe, the epileptic sleep was much shorter, and the patient regained her faculties sooner. The pills were, during the last six months of 1898, increased to six daily, during which time only three fits occurred, with occasional attacks of *petit mal*. In 1899 she was placed on the double

strength pill, commencing with three, which was practically the same dose, and was increased every two months by another pill, till five were taken. This dose the patient has continued to take night and morning ever since. During 1899 she had only five attacks. In January, 1900, she had a slight fit, and on the 21st February she had a severe fit. From that date, up to the first of February, 1902, she was absolutely without a fit, though there was occasionally slight attacks of *petit mal*, but on the 2nd of February, 1902, while at dinner, she was seized with an attack, which at first seemed as if it would only be a slight threatening, but it developed into a fairly severe fit, though not as severe, by any means as those she generally took before commencing the Hydrocyanate of Iron. Looking back over the history of this case, which is but a mere outline of forty years, I have no hesitation in saying that this pill has done far more for my patient than any other drug she has taken. I had hoped when I began writing this case, that I would have been able to state that she was absolutely cured of the *grand mal*, having been nearly two years without a fit, but the attack on February first makes it impossible. Still, when we consider that for nearly two years, she had been practically absolutely free from the disease, the influence of the Hydrocyanate of Iron must be admitted as being most powerful for good in this disease.

Case II.—Miss W., a woman of about 28 years of age, unmarried, consulted me in March, 1900, for epilepsy. Had been subject to the disease since the age of 15 years. Had occasional treatment without relief. No hereditary history. She took the fits always at night, generally two and they came on every month, occasionally two or three times in a month. I placed her on the 1-2 grain Hydrocyanate of Iron pills—one night and morning, and increasing one pill every three weeks till five were taken, when I changed to the one grain pill of which she is now taking four night and morning. I prescribed half a drachm of bromide of potash at bedtime. The effect of the pills were very marked, as during the first three months she had only one attack and mild. Then four months elapsed

without a fit, and, believing herself cured, stopped the pills, when the disease returned as severe as ever. On their resumption, the beneficial effect was again marked. Two or three times since, not having the money, she was unable to get the pills, and their discontinuance was invariably followed by return of the attacks in a severe form. At the time of writing, she had taken them steadily for nearly four months, and has only had one mild fit.

Case III.—A. L., aged about 27, a blacksmith by trade, and a patient of mine from birth, developed the disease about the age of 17. No cause could be ascertained, except that about that time he seriously abused himself with liquor. The fits came on every two or three weeks, and he has had as many as five in one night. I placed him on the nitro glycerine treatment, with moral treatment added. He certainly was benefited by it, as their frequency and severity was diminished. In 1899 he married, and shortly after the fits returned as bad as ever. I then put him on the Hydrocyanate of Iron, when he went nearly five months without one, but, going on spree of some two weeks, they again returned, but not so bad. I cannot get the patient to take the pills regularly, so that he does not give them a fair chance. His family, however, recognize the great power they have over the disease.

Case IV.—K. W., clerk in an insurance office, aged about 35 years, was, in 1890, referred to me for epilepsy. The attacks came on irregularly, night and day, and were a mixture of both the *grand mal* and the *petit mal*. I put him on the nitro glycerine treatment, with bromide of potash, night and morning. No apparent beneficial result followed. In fact, the attacks rather increased, till he was discharged from his situation in 1895, on account of having several severe attacks in the office. Before this, he had been, singular to say, free from any severe attack while at work, though *petit mal* attacks had been numerous. At this time the nitro glycerine was discontinued, and the patient put on bromide of potash alone, which seemed to diminish the frequency, but not the severity of the fits. Upon one occasion during this year, after an attack, he was

so violently insane that I was sent for, and only succeeded in getting him quiet by a hypodermic of morphia. In 1896 he came to my office, but seldom, and, I think, only once in 1897, when the report says "no improvement." I did not see him again till the first week in October, 1901, when he came to my office, and I have the following entry in my note book: "Patient continued my treatment till the spring of 1900, when, seeing no benefit, upon the advice of some friend, he began to take a medicine which was said to have completely cured a prominent gentleman in St. John, N.B. I cannot find out what this medicine was. The patient, however, says it not only did him no good, but under it, he became much worse, till, at this time, he had a severe fit every ten or fifteen days. I placed him on the Hydrocyanate of Iron, giving the one grain pill, and with instructions to increase one pill every three weeks. The patient has reported me once a month, since he began this remedy. The following are the reports, up to date (March 18). *October 31, 1901.*—No attack since commencing the pills. *Nov. 30.*—Only one slight seizure. This was taken in church, and was simply a shadow. He sat in the last seat, and few, I am told by his brother, recognized anything unusual. *Dec. 30.*—One slight seizure at night, during this month. *Jan. 30, 1902.*—No attack this month. *March 18.*—No fit since early in December. These reports show a marked improvement, and his friends recognize a general improvement in his condition. There can be no doubt of the beneficial effect of the Hydrocyanate of Iron in this case.

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Case V.—A. R., aged 15, came to my Clinic at the Montreal General Hospital, on the 23rd of January last. Had his first epileptic fit at the age of eleven years. They recurred at first at intervals of five or six weeks, but for the last year they came on more frequently, till at the time he came to the Hospital, he took a severe fit every four days. He was placed on the Hydrocyanate pills, one night and morning. He was then two weeks without a fit, when one occurred on the 6th of February. About a month elapsed without a fit, when he had one on the street

on the 4th of March. He was left lying in the snow, and the following day, developed a pneumonia of the base of the right lung. On the 26th of the present month he is convalescent, and has not had another fit. While this case is not cured, it is cited to show that the Hydrocyanate of Iron has already vastly improved the patient. He had been under other treatment before coming to the Hospital, and not only had there not been any improvement, but the patient had steadily grown worse.

**THREE CASES OF GRAVE INJURY TO THE EYEBALL
WITH ULTIMATE RECOVERY OF USEFUL VISION.**

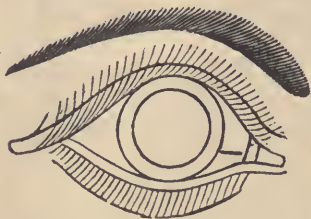
By George H. Mathewson, B.A., M.D.,

Lecturer on Ophthalmology, Medical Faculty, University of Bishop's College,
Oculist to the Western General Hospital.

As most of the readers of the RECORD are general practitioners who are so situated that they must often treat serious injuries of the eye, whether they will or no, I need make no apology for citing the following instructive cases:

Case I.—On Nov. 4, 1900, Carl A., a Swede from Radnor Forges, was sent to me by Dr. W. H. Drummond for treatment. Seven days previous to his visit to me he had (while working with a sledge-hammer) been struck on the right eye by a fragment of steel. He consulted immediately a local physician, who ordered him to stop work and prescribed atropin drops. After the first shock of the injury had passed away the eyesight was good, and the eye gave little trouble until the fifth day, when it became very red and painful, and vision was greatly reduced. Two days later he came to Montreal. On examining the eye I found it very red (from intense scleral and conjunctural inflammation), the pupil widely dilated (from atropin). In the bottom of the anterior chamber was a small deposit of yellow exudate, *i. e.*, hypopyon. The eye was very tender to the touch, and gave patient considerable pain. No red reflex could be obtained when light was thrown into the pupil, nor could the fundus be seen with the ophthalmoscope. By oblique illumination a yellowish reflex was produced, a mass

of yellowish gray exudate could be seen lying in the vitreous, filling the whole pupillary area. Vision was reduced to



counting fingers at a distance of three feet. The site of the wound was marked by a scar in the median horizontal line near the caruncle.

Here, you see, is a condition of severe irido-cyclo-chorioiditis resulting from a wound, just the condition to produce sympathetic ophthalmia. The patient was sent to the Western General Hospital and put to bed.

Both eyes were protected by a large shade (if one eye is diseased *both* must be shaded, if you wish to derive any good from the shading). Hot fomentations and subsequent irrigations, with a solution of bichloride of mercury, 1/6000, were ordered to be given q. 3 h. Drops consisting of a combination of atropin sulph. 1 per cent. and cocain mur. 2 per cent., were instilled into the eye t.i.d., and after the fourth day a pill consisting of one grain each of Pulv. Hydrarg. c̄ Cretâ and Pulv. Ipecach Co. was given t.i.d.

I feared the worst, but felt that he should be given every chance before enucleation of the diseased eye was resorted to.

Next day the inflammatory symptoms were less severe, and on the third day the hypopyon had quite disappeared.

A radiograph of the eye was taken on the third day (by our radiographer, Dr. Robt. Wilson), and showed that there was no steel or other foreign body in the eye.

November 14, ten days after the patient's admission to the hospital, I made out for the first time the optic nerve and details of the fundus.

By this date the tenderness had quite disappeared.

On December 24, R.V. = 6-18, and with + 3.50 spher. (to compensate for cycloplegic effect of the atropin, which he was still using) he could read Jaeger No. I. at 25 cm.

On this day, at his urgent and persistent demand, he was allowed to return to Radnor Forges, on condition that

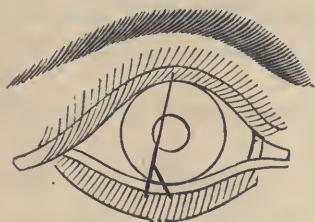
he report in a month's time or sooner, if the eye troubled him in the least. He was given atropin sulph. 1 per cent. drops for local application and the same pill as before for internal use.

On Jan. 21, 1901, he came to see me and I found the R.V. = 6-12, and that the opacities in the vitreous had largely disappeared. He had been working at the iron furnaces for three weeks.

On April 2, 1902, he reported once more, R.V. = 6/12. I stopped the mercury and gave him atropin sulph. drops 1 per cent., to be used every second day, with the idea of preventing relapse, which is very common in this disease. On this occasion he was very drunk and said he was going to Cape Nome to find gold, and I have never been able to find trace of him since, which is unfortunate, as one cannot be certain the cure was permanent, though after five months without relapse it is likely the eye remained well.

Case II.—On Feb. 13, 1901, I was consulted by Miss D., who had injured her eye while attempting to open a bottle of ginger ale. The bottle broke at the shoulder, and a fragment of glass struck the patient on the right eye. I saw her half an hour after the accident, and found the condition of the right eye to be as follows:

Running across the cornea from below upwards, and slightly to the temporal side of its centre, was a wound that involved the whole thickness and breadth of that structure, and extended into the sclera about 0.5 mm. above, and 1 mm. below. A second short cut began in the sclera below, extending into the cornea and joining the larger wound



so as to make a short corneal flap. The anterior chamber was empty, and there was a slight prolapse of vitreous, while the iris lay against the cut cornea, and was caught between the lips of the wound in nearly its whole

extent, though it did not prolapse as far as the anterior sur-

face of the cornea. Right vision = counting fingers at three feet.

I had the patient removed to the Western General Hospital, where I excised the prolapsed vitreous under cocaine, and sprinkled the wound with iodoform instilled a drop or two of 1 p.c. atropin solution, applied a firm bandage and had patient put to bed, and atropin drops t.i.d. were ordered, while the eye was kept bandaged.

The next day the anterior chamber was restored, but the iris was found to be still firmly caught in nearly the whole length of the wound, in such a way that the temporal part of the iris was tense while the nasal part with most of the pupillary border, was in its normal position. The temporal part of the anterior chamber was thus largely obliterated and cut off from the other part.

On Feb. 25 the corneal wound burst open during sleep, but closed again in a few hours.

On Feb. 27 Vision Right Eye. = Fingers at 18 ft. Tension rather high.

On March 3 corneal wound again burst open, this time from patient starting up violently from sleep in fright. Wound again closed in a few hours.

On March 5 the corneal wound again burst open, this time quite spontaneously, so I decided that the trouble was due to the pressure of the aqueous fluid against the adherent iris, which pressure did not act equally on both lips to the wound.

I performed an iridotomy, therefore, the same day, making a corneal incision above, introducing iris scissors and cutting off that part of the iris which was caught in the lips of the wound, keeping the blades as close as possible to the cornea.

The new wound healed kindly and the old wound closed and remained so.

For some time the eye remained sensitive to light, but finally became quiet and the patient left the hospital on March 26 six weeks after her admission.

On April 6, 1901, R. Vision 6-60 and she could read Jaeger, No. 8 at 25 cm., *i.e.*, ordinary print at the usual distance.

On Feb. 26, 1902, patient could read Jaeger, No. 5, quite fine print and her distant vision R. V. 6-24.

Here we have a case of perforating wound in the ciliary region and of large size, with vision very much reduced, and still it was not necessary to enucleate the eye, but by proper care the patient has a very serviceable eye.

Case III. Mr. V.—While chipping out rivets on April 3, 1901, patient was struck on the right eye by a flying fragment of iron. When I examined his eye next day I found a small corneal wound already closed, considerable pericorneal congestion and a beginning traumatic cataract.

The lens swelled up so rapidly that in a few days the tension was dangerously high and the iris was seriously inflamed from the pressure of the swollen lens, that I decided to remove part of the disintegrated lens.

The patient was a very powerful man and did not behave well during the operation, and just as the corneal section was completed, closed his eyelids together with such force that a large part of the softened lens tissue, and a very large amount of vitreous humour were forced out of the wound.

I feared at first that the retina had been detached, but finding the patient could count fingers I filled the globe with normal saline solution and bandaged the eye in the usual way.

I was much gratified next day to find the wound firmly closed and the chamber restored. The further course of the case was uneventful and the patient was discharged May 18.

When seen about a month later Vision R. Eye $\bar{c} + 10.00$ Spherical = 6-60 and could have been easily improved as the pupil was largely closed by secondary cataract, which, however, it was thought not advisable to operate on at the time, as patient had to support a family and could see with left eye.

The conclusions I would have you draw from these cases are :

First.—Do not be too hasty in deciding to enucleate a wounded eye, even though the wound be large and vision bad. Treat the condition for some days expectantly, always being on the lookout for “shrinking tenderness” to touch, which is the chief danger signal in these cases as it proves the existence of iridocyclitis in the injured eye.

Second.—Filling the globe with saline solution in the last case, undoubtedly saved the eye, as it made possible an exact coaptation of the lips of the wound, which could not have been had in the previous collapsed condition of the globe.

GEO. H. MATHEWSON, B.A., M.D.,
56 Crescent St.

Abstract of several papers recently published by William
S. Gottheil, M.D., of New York.

(Communicated by the author to the *Canada Medical Record*.)

ACTINOTHERAPY, GOTTHEIL.

(*Author's Abstract.*)

In a preliminary communication upon the use of concentrated light in the treatment of dermal affections W. S. Gottheil briefly reviews the work done by Finsen, Kime and others in this field, and describes the arc light that he employs for the purpose. This is at present the only available source for the actinic rays of sufficient volume and intensity for therapeutic employment. Sunlight is of course the best, and is costless ; but it is too uncertain for satisfactory use. No combination of incandescent bulbs, run on the ordinary continuous or alternating commercial current, is sufficiently actinic, and the apparatuses arranged with them practically give us heat and no light baths.

The author employs an apparatus called the Actinolyte, made by Kliegl Bros., of New York, which can be

adopted to either the continuous or the alternating current, uses from 25 to 55 amperes and gives a concentrated circle of light of from 20,000 to 30,000 candle power. He is not prepared as yet to publish his results, but the progress of cases of lupoid and syphilitic ulceration has been most encouraging. The cosmetic results of this non-operative and painless method of treatment are especially good ; a point of the greatest importance, of course when the face is involved. (*The Medical News*, July 6, 1901.)

DUHRING'S DISEASE IN CHILDHOOD, GOTTHEIL.

(Author's Abstract.)

Dermatitis herpetiformis, first described by Professor Duhring, of Philadelphia, is probably of commoner occurrence than is generally supposed, more especially in children. Two cases are described by William S. Gottheil, of New York, in the June number of the *Archives of Pediatrics*. The resemblance at first sight to an ordinary eczema, dermatitis, or impetigo is marked, and, doubtless, cases of the disease are not infrequently so classified. The points which distinguish the less common affection are :—

1. The extreme obstinacy and chronicity of the malady ; it being prolonged almost indefinitely by successive exacerbations or relapses.
2. Its original herpetic character and subsequent multiplicity of lesion.
3. The intense pruritus.
4. Its recalcitrancy to treatment.

Any apparent eczema, dermatitis or impetigo in children presenting these features should be carefully observed ; a certain number of them will undoubtedly be found to be cases of Duhring's disease.

THE CUREABILITY OF SYPHILIS, GOTTHEIL.

(Author's Abstract.)

Speaking of the cureability of syphilis in the symposium upon that disease in the October number of the *International Medical Magazine*, William S. Gottheil, of New

York, takes exception to the opinion of its practical incurability which is prevalent in certain quarters. Every day experience shows that the great majority of cases are cured in every practical sense, the occasional late relapses and accidents to the contrary, notwithstanding. He concludes:

1. Syphilis is a curable disease, and may even, with restrictions, be called a self-limited one.

2. Whilst cure in a given case cannot be affirmed with scientific accuracy, the chances of its being the fact after a certain time under proper treatment are so great that it may be properly claimed to have been affected.

3. Practically, a patient who has been properly treated throughout the active stages of the disease, and who has had no manifestations of its persistence for several years thereafter, may be regarded as cured, and may be told so.

THE UNRECOGNIZED CHANCRE, GOTTHEIL.

(*Author's Abstract.*)

In the *International Medical Magazine* for October William S. Gottheil calls attention to the frequent insignificance and fugacity of the syphilitic initial lesion, which leads to its non-recognition in quite a large proportion of cases. Ignorance of its occurrence, and not voluntary falsification, is the cause of the frequent absence of a syphilitic history in undoubtedly specific cases. The author calls attention to the following points of diagnosis:—

1. The presence of a tumor as the original lesion. In its essence, and invariably at the beginning, the chancre is a small round cell accumulation in the skin or subcutaneous tissue. Ulceration may occur, and usually does, or even phagadaenism; but these are accidental, and epiphenomena, and almost invariably the specific induration is appreciable at the base of the lesion.

2. The tumor is indolent, painful and recalcitrant to treatment.

3. A peculiar and characteristic "stony" induration of the nearest lymphatic glands accompanies it, different from

the general adenopathy that occurs later as a consequence of the systemic infection. Other lesions, as gummata, do not show it.

4. Chancre runs its full course in a few weeks, whilst tuberculosis takes months, and carcinoma even years, for its development.

5. The well known signs of general luetic infection, osteocopic pain, cephalalgia, synovitis, general lymphadenitis, exanthem, etc., must be carefully and persistently searched for in every suspicious case. They may be so slight as to entirely escape careless examination.

Selected Articles.

GALLSTONES.

According to recent statistics, it has been found that in round numbers about one person in every fifteen has gallstones; and furthermore, that of those so afflicted, death was attributed to the presence of gallstones in over 11 per cent. of the cases—that is to say, in every 1,000 deaths, 76 are attributed to gallstones. The disease is first mentioned (as occurring in man) some time in the fifth century, although at a much earlier date the Egyptian priests observed that domestic animals were afflicted with it.

Age is a prominent etiological factor, the disease being most common after the age of forty. Women are more often affected than men, some writers giving the proportion of three to two, while others give as high as five to one. The greater liability of women in this respect has been attributed to their more sedentary habits and the abdominal constriction caused by tight fitting clothing and corsets; but we believe that "criminal neglect of the bowels" should be considered as playing an important role in the etiology of this complaint. Furthermore, it has been unquestionably proven that gallstones are most frequently found in the gouty, lithæmic and obese. *In other words, the same constitutional factors favouring the production of uric acid excess are favourable to the production of gallstones.* Indeed, the term "cholelithiasis" is itself indicative of the uric (lithic) acid dysarasic.

A diminution of the sodium salts in the bile is consid-

ered one of the chief causes which lead to a separation of its elements, making stone formation possible. The fact, too, that most stones are composed of from seventy to eighty per cent. cholesterin would indicate inspissation and viscosity of this fluid caused by a loss of its alkaline ingredients and the consequent inability to oxidize the colloid waste brought to it by the circulation. Again, although no change takes place in healthy bile, excreted from a healthy liver and contained in healthy biliary passages, yet, if prevented, for any reasons, from escaping for a considerable period of time, as in chronic constipation, the bile becomes altered in character decomposition ensues, and the bile elements are deposited.

The treatment may be considered from two stand-points—medical and surgical. If the stone is sufficiently large to be detected by palpation or otherwise, and excites inflammation, violent pain, icterus, or other pain signs of occlusion, an immediate operation may be desirable. But in that vast majority of cases in which the diagnosis has been made from more obscure symptoms—e. g., malaise, bitter taste in the mouth, constipation, dull pain in the hypochondriac region (accompanied, perhaps, by nausea and other gastric disturbances), occasional chills, fever and sweats, slight jaundice, migraine, etc., or sometimes from the more definite biliary colic,—then, the results of internal treatment may often be found efficacious. While it is doubtless inexpedient to attempt to dissolve stones of considerable size already formed (and too large to pass through the common duct), yet, it is frequently the case that stones are repeatedly formed which are expelled into the bowel, and it is to prevent further formation of these that our efforts may well be directed.

The success obtained from the use of thialion in these cases is doubtless owing partly to the cholagogue and laxative effects of its soda salt in preventing inspissation of bile, and partly to its alkalising and solvent virtues in clearing the blood of uric acid and its congeners and preventing obstruction of the capillaries from colloid waste. By its influence the bowels are kept open and free, and a more generous flow of bile instituted from the gall passages; the liver, as well as kidneys, is stimulated to greater activity, their respective secretions become greater in amount and more alkaline, and thus more capable of oxidizing and holding in solution the waste products of tissue metabolism. In other words, like the blood itself, the bile and urine are ren-

dered more nearly normal in character owing to the influence of the remedy in removing the "*ashes and clinkers*" from the system which clog up its grates and prevent free oxygenation. The same treatment, therefore, which prevents the deposition of urates from the blood (causing gout), or from the urine (causing gravel or renal calculi), will prove equally efficacious in preventing deposits from the bile and the formation of gallstones.—*Uric Acid Monthly*.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

RECENT VIEWS OF THE EFFECTS OF ALCOHOL.

The conclusion reached by Professor Atwater, as a result of experiments conducted by him last year to determine the effects of alcohol on the human system, that the substance taken in small quantities and under certain conditions is a food, has given rise to much and bitter discussion. The garbled accounts given in the newspapers of Dr. Atwater's findings are chiefly responsible for the state of affairs. Many of these journals proclaimed that the professor had proved alcohol as a beverage to be harmless, whereas, in fact, he went no further than to declare that it is oxidized in the same manner as any other food materials, and is transformed into heat and muscular energy. The experiments were not sufficiently prolonged to demonstrate what the effects might be upon the human organism of the habitual use of alcohol, nor was any attempt made to show that such use would be any thing but harmful.

Another pronouncement on the same question has been recently made by the well-known Viennese clinician, Prof. Max Kassowitz, who asserts that the dogma concerning the nourishing and strengthening character of alcohol is one of the fatal errors of science. He holds the view that the majority of physicians take up an inconsistent position with regard to the use of alcohol, for the reason that while they

are well aware of its dangerous and poisonous qualities, they, nevertheless, contribute to making permanent the false ideas concerning the value and effects of alcohol which are so generally disseminated. Kassowitz explains these inconsistencies on the ground that the teaching which considers alcohol a food because it is burned in the organism, has held its ground in spite of many disregarded newer investigations which have shown its indefensibility. He is, therefore, of the opinion that the assumption ascribing food properties to alcohol based on simple theoretical consideration is a grave scientific error, the removal of which is the most important preliminary condition to an effectual battle against alcoholism.

Dr. Hermann Blocher, of Basle, Switzerland, in an article in the *Internationale Monatsschrift für die Bekämpfung der Trinksitten* for April, comments very favourably upon Professor Kassowitz's utterances, and discusses the matter from the standpoint of physiological experiment. He refers to the investigations of Miura, which indicate that alcohol belongs to the same group of substances as glycerin, lactic acid, butyric acid, and so forth, which are indeed burned in the animal body, but which, nevertheless, are not fit, even to the smallest extent, to take the place of necessary food in the preservation of the body. Miura found that the addition of alcohol to the food before its being taken not only causes no diminution of the nitrogen output, and does not prevent the loss of body material (as is the case with the addition of sugar or fat), but that on the contrary the nitrogen output following this addition of alcohol may become yet greater than it had been without this addition.

Professor Atwater did not pretend in his experiments to prove the innocuousness of alcohol as a beverage, and it was due to the newspapers that such a belief was disseminated. Whether alcohol in small amounts and used with discretion is harmful has yet to be clearly proved.—Editorial in *Medical Record*.

RESULTS OF TESTING OF THE RENAL FUNCTIONS WITH METHYLENE BLUE.

Achard and Castaigne, who have in the past contributed a number of papers upon this new diagnostic resource, have now published a small monograph on the same subject (Paris, 1900).

The results thus far yielded by this method to date are as follows (it will be remembered by the reader that a solu-

tion of methylene blue is injected hypodermatically, and the interval noted before the colour appears in the urine, as well as the duration of the period of elimination):

In interstitial nephritis there are evidences of impermeability, such as delayed appearance (frequently), and habitually prolonged elimination period. The authors have often made the diagnosis when other phenomena, such as albuminuria, were not in evidence. Considering the insidious nature of this disease, the test should be of great practical value.

In acute and chronic diffuse nephritis it is quite different. Permeability appears to be retained for a long time. The same holds good for amyloid kidney.

In functional albuminuria a slight prolongation of the period of elimination has been observed.

In passive congestion of the kidneys from cardiac weakness the elimination of the blue does not appear to be interfered with. After the condition is of long standing irregularities of elimination will appear.

In diabetes elimination appears to be almost normal. If this disease coincides with actual organic disease of the kidney, impermeability is readily apparent.

In urinary surgery operators have employed the blue in doubtful cases to determine whether or not the kidneys are sufficiently impaired to contraindicate operations on the urogenital tract. The method has been combined with urethral catheterization, so that the permeability of each kidney may be ascertained.

It was thought that the blue might prove of service in obstetrical practice, and foretell the possibility of eclampsia through evidences of renal inadequacy; but these hopes have not been realized. An eclamptic may eliminate the blue normally, while a case which eliminates badly will present no evidence of likelihood of eclampsia.—*Medical Review of Reviews.*

HOW CAN WE TELL WHETHER PLEURISY IS TUBERCULOUS OR NOT?

Given a case of acute pleurisy, can we possibly tell whether the patient will be free from or subject to tuberculosis ultimately? Positively so, in those who have personal or hereditary taints, for they are certainly prone to tuberculosis. As regards those who have no taints, who are apparently in a most favourable condition, we can tell by tests,

which are to be here considered. But in the first place, let it be asserted that such is the case, namely, in spite of the most favourable appearances, acute pleurisy with effusion from a cold, *a frigore*, may be of tuberculous nature. In proof of this, we recall the common occurrence of a young and previously healthy man, without any personal or hereditary taint, recovering in all likelihood from a case of acute pleurisy due to cold, and seemingly primary, after 25 or 28 days, the effusion having been aspirated or resolved according to circumstances. Yet, should this patient be kept under observation, it also occurs quite often that after two or three years, sometimes later, sometimes earlier, his health changes and he is found to be attacked by tuberculosis, which runs a more or less rapid course. Again, we recall the large number of autopsies of cases of acute pleurisy, seemingly primary, in which it was found that tuberculosis existed, and we give as examples, the following brief reports :

In 1884, a man aged 34 years, in good health up to that time, no tainted previous history, is taken sick with acute pleurisy, *a frigore*, and dies suddenly. Post mortem ; 2,200 c.cm. of good fluid ; apex of one lung presents chalky tuberculous mass.

In 1887, a man aged 50 years, robust, in good health up to the time of admission into the hospital, is found to have a large effusion in pleura, necessitating immediate aspiration. He does well for a time, then dies suddenly. Post mortem : 2,300 c.cm. of good fluid ; apex of one lung presents tuberculous mass in the stage of repair, containing bacilli ; tubercles of recent formation in pleura.

But, while it can thus be said that in the great majority of cases of acute pleurisy, with effusion there is a latent tuberculosis and that acute pleurisy *a frigore* is not primary, but actually secondary to tuberculosis, yet, it must also be asserted as a clinical truism, chiefly in the country where cases can be more easily kept under observation, that there are a number of cases of acute pleurisy with effusion that do get entirely well. For instance, Corivaud states that out of 27 cases in his own practice, only four died in a period of twenty years. So, on the one hand we have cases of acute pleurisy, due to latent tuberculosis, on the other, cases independent of it. How, then, can we differentiate ? Clinical investigation is obviously inadequate, since auscultation gives very variable and very uncertain results. We therefore have to depend on laboratory tests. Of these (a) inocula-

tion of animals with the pleural fluid is not entirely reliable, since 40 per cent. of tests in evident cases of tuberculosis give no positive results ; (b) injection of tuberculin is dangerous ; (c) agglutination, as in typhoid fever, lacks precision ; (d) cultures, though made on the best gelose-blood, are too delicate to be used in a general way ; (e) Finally, the *cytodiagnosis* introduced by Widal and Ravant, is by far the most accurate. The following is the information we gather from the procedure, based on the *histologic examination* of the pleural fluid.

When we examine the fluid of a pleurisy in Bright's disease, we find endothelial cells in sheets, and should there be in the history the occurrence of hemoptysis, the latter is accounted for by the circulatory disturbances of Bright's disease.

When we examine the fluid of a pleurisy consequent upon pneumonia, typhoid fever or other infections, we find large mono or polynuclear leucocytes.

When we examine the fluid of a pleurisy of *a frigore*, we find on the one hand red blood cells, on the other small white cells, lymphocytes.

Summing up we have the following formulas in cytodiagnosis :

(a) Endothelial sheets in mechanical pleurisy due to circulatory disturbances.

(b) Large mono or polynuclear leucocytes in pleurisy of infectious origin, not tuberculous.

(c) Red blood-cells associated with lymphocytes in tuberculous pleurisy.

As these results in cysto-diagnosis have been confirmed by the culture, inoculation and agglutination procedures, it is therefore certain that the presence of erythrocytes and lymphocytes in the same field shows that the fluid examined is of tuberculous nature.—*Journal de Médecine et de Chirurgie pratiques*, August 10, 1901.

HINTS FOR DYSPEPTICS.

Eat slowly, masticating the food very thoroughly, even more so, if possible, than is required in health. The more time the food spends in the mouth, the less it will spend in the stomach. Avoid drinking at meals ; at most take a few sips of warm drink at the close of the meal, if the food is very dry in character. In general dyspeptic stomachs

manage dry food better than that containing much fluid. Eat neither very hot nor cold food. The best temperature is about that of the body. Avoid exposure to cold after eating. Be careful to avoid excess in eating. Eat no more than the wants of the system require. Sometimes less than is really needed must be taken when digestion is very weak. Strength depends not on what is eaten, but on what is digested. Never take violent exercise of any sort, either mental or physical, either just before or just after a meal. It is not good to sleep immediately after eating, nor within four hours of a meal. Never eat more than three times a day, and make the last meal very light. For many dyspeptics, two meals, are better than more. Never eat a morsel of any sort between meals. Never eat when very tired, whether exhausted from mental or physical labour. Never eat when the mind is worried or the temper ruffled, if possible to avoid doing so. Eat only food that is easy of digestion, avoid complicated and indigestible dishes, and taking but one to three kinds at a meal. Most persons will be benefited by the use of oatmeal, wheat meal, cracked wheat, and other whole grain preparations, though many will find it necessary to avoid vegetables, especially when fruits are taken.—*Public Health Journal*.

VERATRUM VIRIDE IN MANIA.

Any physician who has not employed veratrum viride in acute mania has missed the best agency which is available for the cure of these distressing cases. It is one of the greatest advantages a physician can have to see the feverish sufferer, under the application of this remedy, pass from absolute sleeplessness into a state of quiet rest. That many cases which would otherwise go on to death are saved by the use of this remedy is a fact beyond question. The fear which many practitioners have of using veratrum viride, on account of the varying strength of its various preparations, must, of course, be met when the drug is employed, by the use of Norwood's tincture.—*American Medical Journal*.

THE TREATMENT OF RECTAL PROLAPSE IN CHILDREN.

Hajeck recommends the use of ice in prolapse of the rectum. A tapering piece of ice, about three inches long and about an inch in diameter at the thick end is wrapped with iodoform gauze, and its point is pressed gently against the center of the prolapsed mass until it is replaced. The ice

tampon remains in the rectum without the use of any retentive bandage, provided it is pushed in far enough. A fresh piece of ice is employed in this way after each act of defecation. This treatment soon cures the prolapse. It seems to act by emptying the blood-vessels in heightening the contractility of the rectum.—*Courier of Medicine.*

THE SCIENTIFIC STUDY OF THE CRIMINAL AND DEFECTIVE CLASSES.

It is some years since Lombroso, the eminent Italian, began his studies in criminology and endeavoured to trace the impulse of the criminal to an anatomical peculiarity of the brain. Pauline Tarnowsky, the well-known Russian, also contributed to this subject, her principal contribution being a book relating to the anatomical peculiarities of the ears, eyes, etc., of a number of criminal women, including thieves, prostitutes, etc. The first hints thrown out did not fall on fallow ground, and the results so far obtained have been both interesting and satisfactory.

The Fifth International Congress of Criminal Anthropology, in its meeting at Amsterdam, September 9-14, 1901, passed the following resolution:

"The members of the Fifth International Congress of Criminal Anthropology are in favour of the establishment of psycho-physical laboratories for the practical application of physiological psychology to sociological and abnormal or pathological data, especially as found in institutions for the criminal, pauper and defective classes and in hospitals, and also as may be observed in schools and other institutions."

This Congress consists of distinguished specialists from all over Europe, and it is the highest authority. In our country up to date the following associations have passed the same resolution, but referred it to the Department of the Interior: Four National Medical Societies and Associations, the American Medical Association, the Association of American Medical Editors, American Medico-Psychological Associations and the Association for the Study and Cure of Inebriety; thirteen State Medical Societies: Connecticut, Indiana, Kansas, Kentucky, Louisiana, Minnesota, Mississippi Valley Medical Association, North Dakota, New Jersey, Pennsylvania, Texas and Wisconsin; three City Medical Societies: St. Louis, Chicago and Syracuse.

Now that such wide-spread interest has been excited in regard to criminal anthropology, we may expect that the combined studies and records of those who are preparing

themselves to enter this field will be rich in results and furnish solutions to many of the intricate and complicated problems of modern sociology. An editorial in the *American Lawyer*, of New York, gives the best view yet published on the Scientific Study of the Criminal and Defective Classes. It is as follows:

"An effort is being made to establish a laboratory in the Department of the Interior at Washington for the practical application of physiological psychology to sociological and abnormal or pathological data, especially as found in institutions for the criminal, pauper and defective classes and in hospitals, and also as may be observed in schools and other institutions. The defect in our present criminal law is, as we have before remarked, that it regards the crime and not the criminal. It presupposes that all mankind possess an equal power of resistance to anti-social tendencies. It practically lays down as an axiom that the child born of criminal parents, brought up in an environment of crime, is, until he has actually come within the jurisdiction of a magistrate's court, as equally desirable a citizen to all intents and purposes as he who has been reared in the atmosphere of the law-abiding. Until an offence has been committed, the law does not recognize the offender. For it the prospective criminal does not exist. Unfortunately, there are some beings who are moral imbeciles. To confine our efforts to punishing crime when committed rather than to preventing its commission, is like the proverbial locking of barn after stealing of horse. Nothing has been done by government as yet to treat the matter scientifically, and when it is considered that \$600,000,000 is the annual tribute which, statisticians assure us, society pays to crime, and that the United States has the highest murder rate of any civilized country in the world, one is almost tempted to long for a return to the condition of things when one hundred and sixty offences were punishable by death, though it be conceded that the death penalty is one of the slightest of deterrents to crime." The promoters of the measure have our best wishes. As put by the well-known writer: * * *

"The study of man, to be of most utility, must be directed first to the causes of crime, pauperism, alcoholism and other forms of abnormality. To do this the individuals themselves must be studied. As the seeds of evil are usually sown in childhood and youth, it is here that all investigation should commence, for there is little hope of making the world better if we do not seek the causes of social evils at their beginnings."—*The St. Louis Medical and Surgical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.,

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

LABORATORY AID IN SURGICAL TECHNIQUE.

By **GEORGE B. BROAD, M. D.,**

Syracuse, N. Y.

Instructor in Pathology and Bacteriology, Syracuse University, College of Medicine ;
Gynæcologist, Syracuse Free Dispensary ; Assistant Gynæcologist
St. Joseph's Hospital, Syracuse.

Wound infection is a matter of such grave moment that I feel I need no apology for presenting a few facts learned in the laboratory bearing upon this all-important subject.

It has occurred to every one engaged in surgical work to any extent to have now and then a case of suppuration, where apparently the utmost care was used in preparation and during the surgical procedure. Suppuration cannot occur without infection from some source, and to trace this source has been my endeavour.

My first work along this line dates back to 1897, when a series of experiments with hands known to be infected was undertaken. Prior to that time, rubber gloves had not been generally used, and the operator was sometimes compelled to work in virulent pus, both during the operation and at subsequent dressings. These hands by culture-testing were known to be infected by the staphylococcus pyogenes aureus. Then began a systematic effort to rid the hands of this infection. Strong antiseptics were used, and culture-tests made after their use, to note the effect of antiseptics on hands known to be infected.

First, bichloride of mercury was used in strengths of 1-2000 and 1-4000, the hands being first scrubbed with green soap and water. The hands were soaked in bichloride of the above strengths for periods varying from five to fifteen minutes. In every instance, after these washings, culture-testing always developed the staphylococcus.

After two weeks' work with bichloride, the infection still persisting, this was dropped and the permanganate-oxalic-acid method tried. This method was used for two weeks,

cultures being taken after the washings. Here, as with the bichloride method, finger scrapings and pieces of skin in culture media always developed the *staphylococcus aureus*.

Formalin was next used in strengths varying from 1 to 4 per cent. With it results were at first more gratifying. No growth would appear until about forty-eight hours, when the bouillon would begin slowly to cloud. But with the formalin, as with the other antiseptics at no time did the growth of the micro-organism fail to appear. Then followed scrubblings with green soap and water, no antiseptics being used, but still the microbes developed. Then followed a rest of several weeks, our victim going out of town. On his return culture-testing still proved that the *staphylococcus pyogenes aureus* was present, but guinea pig inoculations showed it to be of lessened virulence. Disgusted with our findings, the subject refused further experiment.

Here was an infection which extended over a period of three months and persisted in spite of strong antiseptic. How much longer it remained I do not know. I think we have a right to say that the unprotected hands can be, and often are, a source of infection to our patients, even though washed in strong antiseptic solutions. The culture medium used was bouillon and agar-agar.

The possibility of silk being sometimes the cause of infection led to some work with it, to see just when it was rendered sterile by boiling. Different sizes of silk from one up to twenty were first infected with a pure culture of the *staphylococcus pyogenes aureus*. This organism was chosen because by far the larger number of cases of suppuration are due to its presence.

The silk was boiled up to seventy minutes, pieces being removed under aseptic precautions every five minutes. The water was brought to a boil before the silk was dropped in, temperature 212° F., without pressure. We found, as might be expected, the larger the silk the longer the time required to render it sterile.

Number 20 silk was boiled sixty minutes before becoming sterile; No. 16, forty-five; No. 12, forty; No. 8, thirty-eight; No. 6, thirty-five; No. 4, thirty minutes, and all below No. 4 was boiled twenty-five minutes, except No. 1, in which no growth was obtained after eighteen minutes' boiling.

I admit this is a pretty hard test, for some silk may not be badly infected, and perhaps no silk would be as badly

infected as was the silk used for these tests. Still, I know of no other ground on which to work, for we must assume that silk is infected unless we know otherwise. and must sterilize on this assumption.

Silkworm gut as a means of infection was next considered. The silkworm was used as it came from the factory. Work was done also with silkworm gut, which had been infected with the *staphylococcus aureus*. No growth could be obtained from either after forty-five minutes' boiling. We had previously, as routine, boiled our silkworm gut five or six hours for two or three consecutive days. This long boiling may be necessary with some silkworm to render it sterile, still I know of no pyogenic micro organisms that can withstand anything like that amount of boiling. Certainly, in an experimental way, no growth could be obtained after silkworm had been boiled for the time above stated. I am strongly inclined to believe that much of the infection laid at the door of silkworm gut is really an infection from the skin of the patient, or may even be a post-operative infection.

The sterilization of catgut is a question of extreme importance. During 1896 and 1897 most of the catgut with which we worked was prepared by the bichloride method. The gut, after the fat had been dissolved out, was put in a 1-100 alcoholic solution of bichloride and preserved in alcohol or glycerin alcohol. This method was a fairly good one, and it was exceptional that any infection was found on culture-testing.

Formalin was next used in catgut preparation in strengths varying from 2 to 8 per cent., following somewhat closely the method of Vollmer and Kossman, who made strong claims for this method. With me it was not satisfactory. I found I could sterilize the smaller gut as Nos. 0, 1 and 2, but anything larger than No. 2 was uncertain.

I have had some experience with the ammonium-sulphate method as described by Elsberg. This method is based on the chemical fact that animal tissue can be boiled in a solution of ammonium sulphate without disintegrating, which fact is true. The catgut would not disintegrate, but its strength with me was much impaired. It could, of course, be rendered perfectly sterile by boiling. The method which seems to me the most perfect is the sterilization of catgut by dry heat. The gut, after the fat is dissolved, is placed in parchment or bond envelopes, doubly sealed. These envelopes when sealed are subjected to a heat of 300° F.

or practically 150° C., for three hours, and on the following day to the same heat for one hour, to kill any spore which may have resisted.

Culture-tests have shown that catgut prepared in this way is absolutely sterile. When this heat is maintained in a proper oven, asbestos-lined, to prevent strong radiation, we have a gut which is strong, sterile, and in every way desirable. These facts are borne out by clinical experience. It has been used by Dr. A. B. Miller, of Syracuse, as well as myself for the past two years in both hospital and private practice without a single case of suppuration in the line of suture from its use. It seems to me in this method we approach nearest the ideal, for we can produce a gut strong and absolutely sterile by the simplest and best of all agents, viz., heat, without the use of a single chemical. It is also convenient and can be carried in the surgeon's grip without fear of contamination.

Rubber gloves and their sterilization were next undertaken. Rubber gloves were first infected with the staphylococcus aureus. These gloves were boiled and portions of them removed under strict asepsis, at intervals of five minutes up to thirty minutes. Rubber boiled fifteen minutes gave a growth, while rubber boiled eighteen minutes was sterile.

One other source of infection which may or may not be of much practical importance is the expired air. A few limited experiments have convinced me that bacteria are given out from mouth and nose. Whether these bacteria are given out during respiration or during speech is a matter of little moment to the surgeon. A crude mask was devised and worn for one hour, at the end of which time pieces of gauze through which the wearer had been compelled to breathe were removed. This gauze was contained in a little chamber held from the face so that any contamination from respiration could be excluded. Examination of this gauze has always given a growth.

The bacterial growth from this gauze was made up largely of staphylococci, diplococci and an occasional bacillus. My work along the line of expired air is so limited that it can count for but little as yet. Still, in this way we may be able to explain an occasional case of suppuration, when an assistant or observer has been present who was suffering at the time from some suppurative disease of the nose or mouth.—*N. Y. Medical Record.*

UPON THE DIAGNOSIS OF ABDOMINAL DISEASES.

CHARLES C. ALLISON, M. D.,

Professor of Surgery at Creighton Medical College, Surgeon to Presbyterian and St Joseph Hospitals, Omaha, Neb.

Methods to be of the greatest value as diagnostic aids in the interpretation of abdominal diseases must be comparatively simple. They must be based upon anatomical considerations, and upon the most reasonable pathology. In other words, we should suspect the most probable conditions, and bear in mind all of the possibilities which may obtain in a given case. It is this latter feature I take it which is most frequently neglected; that is, the cultivation of the habit of bearing in mind all of the pathic changes that can occur in a given case rather than looking for a few of the more common diseases.

A simple working method which has been found practical of utility by the writer is the elimination, when possible, of functional disturbances; but this can be done only by the most painstaking examination; when this has been done we may classify pathology of the abdomen into three groups, namely: (a) Inflammatory; (b) Neoplastic; (c) Gynaecologic.

Taking the inflammatory as the most common type of trouble in this classification, it will be well to decide whether there is a localized peritonitis or an inflammatory catastrophe, which involves the entire peritoneum.

We would not aim to attribute an undue proportion of inflammatory expressions to the appendix, but we believe it to be generally admitted that in the male septic peritonitis has its origin in this organ in ninety-five per cent. of all cases.

We will not point out at this time that left-sided pain, even in the upper quadrant of the abdomen, is not unusual in its disease. Taken as a whole, medical and surgical minds, we believe, have attributed too much uniformity to the location of the appendix.

If it be deep seated with its apex pointing towards the left, the septic peritonitis may be practically limited to the left side, the tip of the appendix lying to the left of the inferior attachment of the mesentery, and the initial infection in such a case would be limited to the left side of the abdomen, muscular rigidity will be general and probably most to the left of the median line, the pain will be radiating, the tenderness general, the most acute exacerbation in these cases will be sinister in character.

Next in frequency of inflammatory conditions of the lethal type is perforating gastric ulcer. The antecedent

history of the individual's health will usually avail in suggesting this condition, but the shock which attends the actual perforation is so great that the diagnosis may generally be suspected when clammy skin, hurried respiration, thready pulse, subnormal temperature, acute pain and inefficient emesis are found to have suddenly developed.

Rupture of the intestine or perforation of the duodenum will assume in a measure this clinical picture, but the combined symptoms will be somewhat less pronounced, duodenal ulcer occurring more frequently in men, while gastric ulcer occurs most frequently in women. The duodenal ulcer is longer after the ingestion of the food than the gastric, and is more often associated with some septic process in the body which invites septic thrombosis in the vessels near the liver.

The biliary diverticulum is responsible for many cases of peritoneal inflammation, yet the onset will usually be less acute, the danger of general infective peritonitis not so great as in the conditions which we have named. Sudden rupture of the gall bladder is very uncommon, although a severe lethal infection may so promptly destroy the gall bladder in the gangrenous type of cholecystitis, that the result may be a peritonitis as acute and dangerous in character as has been described as following an acute perforation of the stomach. Eliminating this somewhat rare type of trouble, however, diseases of the biliary channels will not be essentially difficult to diagnose if we but remember that there are two sets of symptoms in cholelithiasis; first, when the stones and the attendant infection are limited to the gall bladder and cystic duct, in which jaundice will either be entirely absent, or of but short duration; second, when the stones or infection is limited to the hepatic or common duct, when recurrent jaundice, associated with rigour and fever, will suggest obstruction to the essential biliary canal.

Another point which it seems to the writer is not uniformly borne in mind is, that a continuously distended gall bladder associated with persistent jaundice should always suggest malignant disease.

Localized peritonitis having origin in the appendix, stomach or in the intestine may run a comparatively mild course, due, first, to slow leaking from these organs, and, secondly, to the less infective bacterial agent in the given case.

Instead of the general muscular rigidity, rapid pulse and general symptoms of collapse, there may be some localized pain, a local area of muscular rigidity, moderate elevation of temperature, and, probably, sharp, remittent

pain. In these cases it will usually be possible to cause an evacuation of gas from the bowel, which may be looked upon as a symptom of very considerable security, particularly if vomiting has ceased, and the mental condition, facial expressions and the sum total of symptoms begin to subside.

Turning to the neoplastic class of abdominal lesions, we consider also two features; first, the most probable points of origin of malignant disease, and, secondly, the intrinsic displacement which these growths produce.

It may be said that carcinoma of the pylorus produces earlier symptoms than a malignant development involving the small intestine; that is to say, malignant involvement of the intestine frequently produces inconsiderable symptoms until an acute obstruction has occurred.

Malignant diseases, certainly of the purely carcinomatous type, comes more frequently after the middle period of life, while the inflammatory condition, above named, usually comes before this period.

It does not seem necessary at this time to mention the necessity of beginning an examination by a thorough exposure of the entire field, including the abdomen and the lower portion of the chest.

Nature's method of protecting diseased areas are simple, all her forces being brought to attain physiological rest; this one condition which is most easy to appreciate is muscular rigidity when it is found, as Hilton says, "to involve the muscles adjacent to the diseased areas, particularly those which have a nerve supply of the same origin as the inflamed organ."

This one feature will aid in locating a stone in the kidney, interpreting a cholecystitis; in short, it seems more valuable in many inflammatory conditions than subjective symptoms, and is present, although to a less degree, in neoplastic development.

Bimanual examination should not only be vaginal, but rectal, and should be supplemented by distension of the colon and the stomach in doubtful cases.

Simple emptying of the bladder by catheterization has been known to clear up the diagnosis in an apparently obscure case at the hands of men of recognized ability.

There is a tendency to over-estimate the radiograph; it deserves a permanent place as a diagnostic aid, but the proportion of cases positively identified by this means are small.

In any case we believe that a methodical examination made after a full exposure of the field will enable the phy-

sician or surgeon in the greatest majority of cases to eliminate functional disturbances, to identify neurotic expressions, to interpret an acute inflammatory disease, and to, at least, suspect neoplastic developments in a comparatively early stage, and that by so doing many lives will be saved, either by following a systematic medical course when applicable, or afford an opportunity for an early surgical exploration which will generally be successful in proportion, other things being equal, to the promptness with which it is applied.—*Med. Brief.*

TRAUMATIC NEUROSES FROM THE STANDPOINT OF A SURGEON.

Bevan (*Jour. Amer. Med. Asso.*) says:

1. Real injuries of the nervous system present positive and immediate symptoms.

2. Those alleged injuries of the nervous system, without positive and immediate symptoms of gross lesions, are either cases of malingering or abnormal cerebral states, traumatic neuroses, or a mixture of the two.

3. Traumatic neuroses are the result of two factors: First, a brain readily affected by suggestions; second, suggestions furnished by an accident with or without injury to the individual, suggestions furnished by sympathetic care or craving for sympathy, and lastly, and of greatest importance, suggestions furnished by medical attendants.

4. To establish a diagnosis requires the immediate and sometimes protracted observation of the patient, as in the study of any psychosis. The supposed refined means of diagnosis, as the dynamometer, esthesiometer and electricity, are seldom of value and are often of positive harm as suggestions to the patient.

5. These cases recover rapidly under proper surroundings and advice when the continuing causes are removed. Recovery may be indefinitely postponed under improper surroundings and advice.

6. No secondary degenerations of the nervous system follow traumatic neuroses. The pathologic conditions due to an old-standing traumatic neuroses are the degenerations of disuse and the general deterioration of the individual from confinement, lack of exercise, dejection, etc.

The subject of traumatic neuroses will not receive its proper place until the medical profession recognizes their responsibility in the development and continuance of these conditions, and until proper means are provided for the punishment of malingerers and their alleged medical experts.—*Am. Practitioner.*

BEATSON'S METHOD FOR THE RELIEF OF INOPERABLE CANCER OF THE BREAST.

Some time ago Beatson, a Scotch surgeon, advocated the idea that the so-called special cancer-cells would be found to be vacuolated germinal cells, corresponding with those found in the ovary alone. Acting upon this theory, Beatson made a number of experiments upon the lower animals, and found that after a removal of the ovaries lactation was prolonged as long as suckling was maintained. Beatson then attempted to work out his theory on the human subject, and his first attempt was upon a young woman, whom he subjected to oöphorectomy, and was surprised to find that the large recurrent cancer that had existed in this individual's breast disappeared entirely in the course of a few months. Since that time a number of English surgeons have followed Beatson's examples, and have had more or less success. From what has already been done, it would certainly seem that this procedure might well be adopted by all those unfortunate women who are suffering from inoperable cancer of the breast.—*Cyclopædia of Practical Medicine*.

Therapeutic Notes.

FOUL BREATH.

L'Arte Medica gives the following :—

R_y Saccharin.

Bicarbonate of sodium, of each, 15 grains.

Salicylic acid, 60 grains.

Alcohol, 3,000 grains.

M. Sig.: A few drops in a tumblerful of water.—
New York Medical Journal.

EPSOM SALTS MADE PALATABLE.

R_y Magnes Sulphat..... ½ oz.

Acid SulphDil..... 2 m

Syr. Limonis..... 1 ½ oz.

Aq ad..... 2 oz.

Sig.:— one dose.

FORMULA FOR CHAFING.

For chafing about the groins and under the arms in children, Dr. R. B. Elderice recommends the following formula :—

Ichthyol.....	1 dr.
Comp. tinct. benzoin.....	1 dr.
Boric acid (finest power).....	1 dr.
Petroleum.....	1½ to 2 oz.

Apply with each change of napkin.

—*Ibid.*

HAIR TONICS.

R Acid Salicylic.....	15 gr.
Resorcini.....	½ gr.
Tinct. Cantharadis.....	½ oz.
Tinct. Capsici.....	1 dr.
Saponin.....	1 dr.
Lanolin.....	1 oz.
Aquæ Rosæ.....	ad 10 oz.

Melt the lanolin, dissolve the saponin in the same quantity of water and incorporate the two. Dissolve the acid and resorcini in the tinctures and rose water respectively to make up the required bulk. More spirit may replace the rose water if required. Every night it should be well brushed into the roots of the hair, which should then be dried with a soft towel.

This is an effective substitute for the popular "Erasmus Wilson's hair lotion." Containing no alkali it has no tendency to bleach the hair or cause the affection, which it is employed to cure. It is both antiseptic and stimulative.

R Quinin Sulphal.....	20 gr.
Acid Sulph Dil.....	15 m
Tinct. Cantharadis.....	1 oz.
Haselin.....	2 oz.
Glycerin.....	1 oz.
Aq flor amanti.....	ad 8 oz.

After a vigorous application all excess should be removed with a towel in the same way that one would dry

ones hands after an application to them, for the same reason.

R Hair Tonic.

Tinct. Capsic.....	3 iv.
Tinct. Nux Vom.....	3 iss.
Tinct. Canth.....	3 iv.
Ol Rosmarina.....	3 ii.
Ol Ricini.....	3 iii.
Eau de Cologne.....	3 xii.

The above is an excellent hair tonic.

. LIF.

HOURS FOR FEEDING YOUNG INFANTS.

1 week.	1 to 6 weeks.	6 weeks 1 to 4 months.	4 to 8 months.	8 to 12 months.
4 a.m.	3 a.m.	3 a.m.	7 a.m.	7 a.m.
7 " "	7 " "	7 " "	10 " "	10.30 " "
9 " "	9.30 " "	10 " "	1 p.m.	2 p.m.
11 " "	12 n.	1 p.m.	4 " "	6 " "
1 p.m.	2.30 p.m.	4 " "	7 " "	10 " "
3 " "	5 " "	7 " "	10 " "	
5 " "	7.30 " "	10 " "		
7 " "	10 " "			
9 " "				
12				

Jottings.

HANDY THERAPEUTIC HINTS.

The little finger can be used in taking a delicate pulse when it would be impossible to readily recognize it with the fingers ordinarily used.

Convulsions may be frequently cut short like magic by turning the patient on his left side. The nausea as an after effect of chloroform or ether narcosis may be generally controlled in the same manner.

When chilly from exposure breathe very deeply and rapidly and the increase in bodily warmth will be surprising.

Vomiting after the administration of chloroform may frequently be prevented by replacing the inhaler with a linen cloth steeped in vinegar, it to remain over the face for some time.

People who have weak hearts should always have their principal meal in the middle of the day, and with as little water as possible.

Many a woman's ruin is due to the old idea that a woman can safely leave her bed on the tenth day after confinement.

Crude petroleum, poured upon a burned surface, and covered loosely with cotton, will subdue the pain almost at once.

Black pins in surgical dressings are preferable, because they will not rust, and can be more readily seen when they are to be removed.

Strong spirits of ammonia applied to the wounds of snake bites or rabid animals, is better than any caustic. It neutralizes the virus.

In *post partum* hemorrhage try tying a piece of strong webbing tightly above the knees of the patient.—*Mod. Medicine*.

TREATMENT OF ASTHMA IN CHILDREN.

Kissel reports a number of cases of bronchial asthma in children aged from six to fifteen years. He obtained excellent results from sodium iodide, first recommended by Trousseau. Not only the individual symptoms, but the general condition as well, improved markedly under this treatment.—*Merck's Archives*.

Widal recommends, in the *Journal de Medecin de Paris*, a very simple method for the removal of warts, namely, a flannel, over which is spread some green soap, obtained at any druggist's, placed over the wart for a period of fourteen days, by the end of which time the wart will become so soft as to be easily shelled out.—*Medical Age*.

The *Revista de Medicina y Cirurgia practicas* citing the *Bulletin Medical*, says that the heats and flushings due to the menopause are more pronounced and vexatious in the premature and artificial menopause produced by double castration. Opothherapeutic preparations are costly and very often ineffective. Dr. Gottschalk recommends a more efficacious and simple measure, which consists in taking every evening regularly a full hot bath at a temperature of 104° F., lasting twenty

minutes. After a few baths great improvement is noticeable, and after some twenty-six or twenty-eight a cure is obtainable.—*New York Medical Journal*.

For chilblains Dr. Monroe claims good results from one drachm of acetate of zinc to one pint of water. Keep the parts covered with absorbent cotton and damp with the solution. A good idea is to make a paste of 20 grains to half ounce of lard and keep applied to parts. Both ways have been tried and found good practice.

In the dry, parched, tickling sensation of an acute laryngitis or pharyngitis yerba santa will frequently be found of great value.

The severe pain of gout has been promptly relieved by the application of lint saturated with alcohol and covered with oil silk.

When a child complains of pain in the knee for any length of time, without any evidence of local disease, invariably be on your guard. Nine times out of ten it means that the child has hip-joint disease.

Milk is an excellent antidote to nitrate of silver, in virtue of its large proportion of suspended albumen.

In the headache of migraine one grain of the citrate of caffeine given every hour will often produce most marked relief.

Strychnia is an excellent remedy for uterine hemorrhage from atonicity or inertia. It may be given in advance if such a condition is anticipated.

The compound tincture of benzoin is an admirable remedy for chapped hands, lips, cracked nipples and all frosted conditions, etc.

Pure olive oil is one of the most easily digested and palatable of any of the fats.

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Editorial.

THE DANGERS OF "ICE CREAM."

The season is rapidly approaching when ice cream vendors will appear in considerable numbers in all of our cities and towns. From personal evidence, and that gathered from reading our exchanges, there can be no doubt that it is time that the manufacture and street sale of this delicacy was controlled by law. Last summer two children, one an infant of less than a year, the other nearly three years old, were brought into the out-door clinic of the Montreal General Hospital. Both exhibited symptoms of irritant poisoning. The eldest vomited freely, and made a rapid recovery being practically quite well in about an hour. The youngest one was in a state of complete collapse, pulseless, blue rings about both eyes, and a general cyanotic condition. It tried to vomit, but had not sufficient strength. Under treatment it was sufficiently well to be sent home in between two and three hours. These two children had each partaken of an egg cup of ice cream, purchased from a vendor at a street corner, and were within half an hour seized with the symptoms we have mentioned. Not very long ago an inquest was held in London on a boy aged 6 years, and the

jury attributed its death to unwholesome ice cream. The *British Medical Journal*, writing about this case says: "It appears that the child and an elder brother had eaten some of this comestible obtained from an Italian who was selling it from a barrow, the subject of the inquest consuming a double quantity. The next day symptoms of irritant poisoning set in; one child died four days later, the other recovered. The *post-mortem* appearances were consistent with death from the effects of an irritant poison. Some very wise and justifiably strong remarks were made by the coroner as to the risks run by the consumers of these street commodities. It will be remembered that not long ago Dr. Klein made a bacteriological investigation of some ice-cream and of the water in which the glasses containing it were rinsed, with the result that both were found to be swarming with thousands of micro-organisms. Recently, also, some 20 cases of poisoning were reported among the customers at an ice cream stall in Antwerp, and no doubt this delicacy is responsible for more illness than is ordinarily attributed to it. Nor is this to be wondered at when we consider the sources of contamination arising from the quality of its constituents and the habitual filthiness of its vendors. It is manufactured from the commonest and stalest materials, and stored, usually, under the bed of the merchant in the purlieu of Saffron Hill. The unsold residue is hashed up again, however far gone in decomposition it may happen to be. As the activity of pathogenic bacteria is only temporarily inhibited by the process of freezing, very little hindrance is opposed to their incubation under the favourable conditions afforded by their nocturnal depository. In addition to these circumstances, every provision is made for the transference of communicable diseases from the children themselves, owing to the Italian conception of cleanliness as applied to the washing of the spoons and glasses used by them."

It is our custom to mention through these columns, from time to time, new preparations that are offered the

profession by reliable manufacturers, if they are known to possess real merit. A preparation that is just now attracting much favourable comment from the profession is the new antiseptic emulsion, Firolyptol with Eucalyptol and Kreosote, prepared by The Tilden Company, Manufacturing Pharmacists, New Lebanon, N.Y.

MONTREAL GENERAL HOSPITAL.

We have been favoured with a copy of the Seventy-ninth Annual Report of this most excellent institution. This hospital continues to do a vast amount of good, and with its growing years constantly adds to its supporters the very best citizens of Montreal. During its hospital year, extending in this report from May, 1900, to April, 1901, it added forty-six names to its list of governors, the qualifications of this position being a donation of one hundred dollars. The attending staff of the hospital has not had any change for several years. The ordinary income of the year was \$75,994.18 and the ordinary expenditure for the same period was \$84,280.75, showing an excess of expenditure over receipts of \$8,286.57. Comparing the ordinary expenditure of 1899-1900, \$81,570.75, with that of the 1900-1901, \$84,280.75, the latter year shows an increased expenditure of \$2,710. Comparing the income of 1899-1900, \$67,421.72 with that of 1900-1901, \$75,994.18, there is an increase in the latter year of \$8,572.46. During the year the hospital suffered a very severe loss by the death of its President, Mr. Wolferstan Thomas, who during his term of office, assisted largely, possibly mainly, in having the hospital completely transformed into a properly equipped modern hospital, and the erection of the Jubilee Nurses' Home. This latter is one of the cosiest nurses' home to be found anywhere. Were those, who as students, attended this hospital forty-five years ago, to visit it now, they would not recognize, in the present modern structure, their old medical home. Its nursing staff of the present day is so amazingly ahead of what it was then that one wonders how

the work was ever done successfully by the "Sara Gamps" who passed half of their time in knitting and sewing.

The total number of in-door patients treated to a conclusion during the year was 2,823. There was discharged 2,573 and there died in hospital 250. Of the 250 deaths 105 occurred within three days of admission. Excluding these the death-rate was 5.13, or including them, 8.85. In the out-door department there were during the year 41,606 consultations. These figures show the great work which this General Hospital is doing. Its claim for support is strong, and the public of Montreal, whose generosity is proverbial, will see we feel sure that it does not suffer for lack of funds.

THE AUTHOR.

Miss Otilie A. Liljencrantz, the author of "The Thrall of Leif the Lucky," a Viking romance announced for early publication, is, herself, a descendant of the find old sea-rovers she describes. She is a resident of Chicago, and, although very young, has spent many years preparing herself for her first book. Ever since she conceived the ambition to write a great romance about the Vikings she has made a close study of all the available literature about that period. Her natural inclination and her enthusiasm over the achievements of her forefathers helped her into a ready understanding of the Sagas and all the wonderful traditions of the Northland. The exploits of Leif Ericsson appealed to her particularly and she decided to write her story around his voyages to Greenland, and his famous voyage of discovery to America. After the long time spent in preparation she has put two years into the writing of the book itself, and the publishers say that her perfect understanding of the Viking life will be found one of the greatest charms of the story, that she has contrived to impart the atmosphere of their wild freedom into its every page. Miss Liljencrantz would appear to be

well qualified for her work, and "The Thrall of Leif the Lucky" will be awaited with interest.

DR. RICHARD MAURICE BURKE.

This distinguished medical man graduated at McGill University in 1862, and soon after showed that the trend of his energy was in the direction of mental diseases. In this class of affections he soon became an expert, and was many years ago appointed Medical Superintendent of the Insane Asylum at London, Ont. He continued to fill this position up to his death, which was sudden, and apparently due to an accident. Dr. Burke was a keen thinker and very advanced in his views. His nature was gentle, and he was full of sympathy for the unfortunate. He died on the 19th of February.

Book Reviews.

International Clinics.—A quarterly of clinical lectures and especially prepared articles on all branches of medicine and surgery and other topics of interest to students and practitioners; by leading members of the medical profession throughout the world, edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A., with the collaboration of John B. Murphy, M.D., Chicago; Alex. D. Blackader, M.D., Montreal; H. C. Wood, M.D., Philadelphia; T. M. Rotch, M.D., Boston; E. Landort, M.D., Paris; Thos. G. Marton, M.D., of Philadelphia, and Chas. H. Reed, M.D., J. B. Ballantyne, M.D., of Edinburgh, and John Harold, M.D., of London, with regular correspondents in Montreal, London, Paris, Leipzig and Vienna. Volume III., Eleventh Series. J. B. Lippincott Co., Philadelphia, 1901.

This volume has thirty-one articles and is very freely illustrated with plates and figures. Some of the papers are of extreme interest, notably the one by Valdemar Bic, M.D., Laboratory Assistant in Finsen's Institute at Copenhagen, Denmark, entitled "Phototherapy after Finsen's Methods." This article was prepared by request of Dr. Finsen, who has just received the noble prize of fifty thousand dollars for his valuable services to the medical sciences. The effect of light as a therapeutic agent, according to Finsen's investigation, are here described. The re-

sults in smallpox and lupus are truly marvellous, several photographs of the latter affection showing the condition before and after treatment are very striking and conclusive as to the value of modified light in the treatment of disease. Any one of the other papers can be read with profit. Of special interest are the following: "Antitoxic Sera"; their preparation and standardization by J. M. H. Eyre, M.D., F.R.S., Edinburgh; "Clinical Aspects of Spa Treatment," by Beverly Robinson, M.D.; "Gonorrhoea and Marriage," by Prof. Louis Julien; "On the Drawbacks to the Spinal Use of Cocaine and the Accidents due to it," by Paul Reclus, M.D.; "The Prophylaxis and Early Diagnosis of Heart Disease, Palpitation and Organic Disease; Tobacco and Heart Lesions, Cure of Heart Lesions," by Jas. J. Walsh, M.D., Ph.D.; "Clinical Treatment of Inebriety," by T. D. Crothers, M.D.; "The Localization of Nervous Lesions, Points in the Diagnosis and Surgery of Lesions of the Conus Terminalis and the Cauda Equina," by Prof. Demetrius Roncali; "Surgical Treatment of Appendicitis," by A. Routhier, M.D.; "The Clinical Laboratory in Private Practice and in the Physician's Office," by C. N. B. Camac, M.D., etc.

This valuable quarterly more than maintains the high standard aimed at by its authors, and through absolute merit is making itself almost indispensable to the busy members of the profession as a means of being kept thoroughly posted in medical knowledge.

J. B. McC.

An International System of Electro-Therapeutics for Students, General Practitioners and Specialists. By numerous Associated Authors. Edited by Horatio R. Bigelow, M.D., Permanent Member of the American Medical Association; Fellow of the British Gynæcological Society and of the American Electro-Therapeutic Association; Member of the Philadelphia Obstetrical Society, of the Société Française d'Electro-Thérapie, and of the Anthropological and Biological Societies of Washington, D.C.; Author of "Gynæcological Electro-Therapeutics," and "Familiar Talks on Electricity and Batteries." Second edition. Revised and brought up-to-date, with several new departments embodying the most recent developments of the Science. Edited by G. Betton Massey, M.D., Ex-President and Fellow of the American Electro-Therapeutic Association; Member of the American Medical Association; Author of "Conservative gynæcology and Electro-Therapeutics," etc. Thoroughly illustrated. Royal Octavo. Pages x+1147. Prices net, delivered, extra cloth, \$6.00; sheep, \$7; half russia, \$7.50. Philadelphia, F. A. Davis Company, publishers, 1914-16 Cherry street.

Electricity, as a therapeutic agent, is being employed by general practitioners and specialists to an extent now not dreamed of a few years ago. Improved apparatus, a growing knowledge of the laws and action of electricity in regard to the living tissues of the human body, the recorded experiences of those eminent in the practical application of this remedy, have all tended to increase

the status of electricity as a potent means of rectifying pathological conditions and commend it to more general use. The failures and lack of benefit derived from its use by those who employed it empirically is in marked contrast to the beneficial results which may be obtained from its use in a scientific manner, and in accordance with better understood laws. To employ electric energy in the treatment of diseases successfully and intelligently, requires as thorough a knowledge of the subject as possible, in regard to the physics of electricity, its physiological action and the technique to be employed in its application to various forms of diseases. These can only be thoroughly mastered in laboratories and hospital wards under the guidance of competent teachers, but this knowledge can be gained, to a certain extent, by the possession and study of such a work as the present one, which contains detailed information on all points in this connection and written by those specially trained and from practical experience, capable of giving reliable information and instruction.

This second edition has been thoroughly revised and has four new articles, one relating to the galvanic current, one on the electrical treatment of aneurism, one on Röntgen rays and one on the treatment of cancer by the cataphoresis of mercury. The first section is introductory, and the historical sketch of the rise of electricity, forms very interesting reading. In connection with the earlier investigations, the work done by Pliny, Thales, Gilbert, Guericke, Newton, Gray, Dufay and Nolet, Franklin, Humboldt, Galvani, Volta, Ampere, Devey, Oersted, Berzelius, Faraday, etc., is described and the earlier history of electro-therapeutics in Europe and America is given. Electro-physics and electro-physiology and kindred subjects receive full attention from nine different authors.

Animal electricity is treated by Dr. Wesley Mills. The Galvanic current by G. Betton Massey, M.D. Electro-diagnosis by Dr. W. F. Robinson. Röntgen rays by Max J. Stern, M.D. Cataphoresis, anodal diffusion, electrical osmosis or voltaic narcotism, by Frederick Peterson, M.D.

Section C., gynecology and obstetrics has two articles covering the field of electro-therapeutics in those branches. Among the writers are Drs. Grand and Famarque, assistants at the clinic of Dr. Apostoli, Paris, G. Betton Massey, M.D., Dr. A. Tripin, Paris, Dr. A. Goelet, New York, J. M. Baldy, M.D., F. H. Martin, Chicago, J. H. Kellogg, M.D., A. Laphorn Smith, M.D., Montreal, etc.

In diseases of the nervous system C. Eugene Riggs, M.D., discusses diseases of the brain; Wm. J. Marton, M.D., diseases of the spinal cord; Wm. M. Leszynsky, affections of the peripheral nerves and Morton Prince, M.D., the neuroses.

Disorders of the thoracic and abdominal organs have articles by A. D. Rockwell, A.M., M.D., Dr. Larat, Paris and N. J. Davis, jun., Chicago. Electricity in diseases of childhood, is written by May Putnam Jacobi, M.D. The final section on electro-surgery has nine articles in which the use of electricity is discussed in the chief

specialties and in aneurism, strictures and enlarged prostate, cancer, electro-thermal surgery, facial blemishes and in diseases of the skin.

In these articles the results of treatment are given, the various forms of apparatus employed described, and the method of using them made clear by lucid directions and wood cuts. To those wishing to become familiar with the use of electricity in medicine, according to the most recent authorities, this comprehensive volume can be most heartily commended. J. B. McC.

Annual and Analytical Cyclopædia of Practical Medicine by Charles E. de M. Sajous, M. D., and one hundred associate editors, assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume II., F. A. Davis Co., publishers, Philadelphia, 1900.

Volume II., which was sent in due time by the publishers, through some mishap, was not received, hence the lateness of this review which is of a duplicate volume. We recently reviewed volume VI., the last of the series. The subjects included in this volume are those from Bromide of Ethyl to Diphtheria and include a number which are worthy of special attention as they are carefully written, and exhaustive practical articles. The editor claims his aim to be "to facilitate the labour of the practicing physician, and to assist the investigators and authors in their researches, and to elucidate through contributions from men possessing special knowledge or unusual experience on a particular line of diseases which, owing to their complexity, are not generally understood." That this desirable result has been obtained may be learned from a perusal of some of the more prominent articles, such as those on Diphtheria by Drs. Northrup and Bovaird, Cirrhosis of the Liver by Professor Adami; Cholera by Professor Rubino; Cerebral Hemorrhage by Dr. Wm. Browning; Cholelithiasis by Professor Graham; Dilatation of the Heart by Dr. Vickery; Deaf Mutism by Dr. Holger Mygind; Chloroform by Dr. E. de M. Sajous. One finds in these articles the results of the personal researches of the authors, and a complete summing up of the work and results of the investigation of others, making them valuable sources of reference to practitioner, teacher or writer. A number of excellent colour plates and wood cuts adorn the volume and illustrate the text.

J. B. McC.

A Manual of the Practice of Medicine. By George Bar Lockwood, M.D., Attending Physician to the Bellevue Hospital, New York. Second edition revised, with 103 illustrations, many of them in colors. Price \$4.00. W. B. Saunders & Co., Philadelphia. J. A. Carveth & Co., Toronto, Canadian agents.

This is a volume of over 800 pages written in large type with the lines well separated. It is just a step beyond a simple abridgement of the ordinary text-book of the practice of medicine, in which the essential points are given in as few words as possible.

All such works are useful to the busy practitioner who can in a few snatched moments refresh his memory and prepare himself to intelligently cope with the varied cases he is called upon to diagnose and treat. In this second edition the latest views are incorporated and it may be regarded as a safe guide in modern methods of practice. While there are times when such manuals may be profitably consulted, lack of time can be the only excuse which should induce the practitioner to rely upon them instead of consulting the detailed information of the ordinary text-book, and for the student to rely on such epitomies, will be disastrous to his intelligent conception of the subject studied.

Some of the subjects receive a more extended consideration than one might expect to see in a book of this character, and here and there points are made which give evidence of reference having been made by the author to the most recent literature. Hence the book is all the author claims for it, a manual of the essential facts and principles of the Practice of Medicine in a concise and available form.

J. B. McC.

PUBLISHERS DEPARTMENT.

SANMETTO IN GENITO-URINARY DISEASES.

Dr. B. G. Inman, of Bradford, Ohio, writing, says: "I have used Sanmetto and find that it is all that one could desire in the treatment of urinary diseases. With an experience of thirty eight years of practice I know of no medicine that is more direct in its action in all cases of senile prostatitis and other genito-urinary diseases. I regard Sanmetto as one of our best vitalizing tonics to the reproductive organs, which gives it a wide range of usefulness in the treatment of any nervous troubles."

THE VALUE OF SANMETTO IN SURGICAL OPERATIONS.

It is with pleasure that I attest the merits of Sanmetto, and I think my experience with the drug justifies all the good things I can say of it. I have used it very extensively, and especially do I find it valuable in allaying inflammation in the prostatic urethra, before surgical operations, and in keeping the urine bland and non-irritating after the operation is complete. It always has a soothing and sedative effect upon the kidneys, bladder and urethra. I shall continue its use in all forms of genito-urinary irritation.

THOMAS P. GRAHAM, M.D.

Chicago, Ill.

SANMETTO IN GONORRHOEA, CYSTITIS, PROSTATITIS, IRRITABLE BLADDER, INCONTINENCE OF URINE AND IN SEXUAL NEURASTHENIA AND PRE-SENILITY.

I have prescribed Sanmetto for the past six years, and find it quite agreeable to the patients, being very pleasant to take and of great utility in the treatment of a large number of cases frequently met with in general practice. It has given me uniformly good results in all stages of gonorrhœa, cystitis, prostatitis, irritable bladder and incontinence of urine. I have also found it of great value in sexual neurasthenia and much more satisfactory as an aphrodisiac than any drug that I have employed during my twenty-six years of practice.

WM. PARSONS, M.D.

Chicago, Ill.

CANADA MEDICAL RECORD

APRIL, 1902.

Original Communications.

RETROSPECT OF LARYNGOLOGY AND RHINOLOGY.

UNDER THE CHARGE OF GEO. T. ROSS, M.D., D.C.L.

/ Fellow American Laryngological, Rhinological and Otological Society, Laryngologist, Western Hospital, Lecturer on Diseases of the Throat and Nose, University of Bishop's College.

REMOVAL OF INTUBATION TUBES BY THE ELECTROMAGNET.

Collet describes this process as follows:—The instrument consists of a long, thin coil, which may easily be held between the thumb and forefinger. Two armatures should accompany the instrument, the longer to be used for adults. These are curved, in order to enter the larynx, and the ends are blunt, so that they will make perfect contact with the upper extremity of the tube. Before using the instrument, the circuit should be completed and the jaws fixed open. The curved extremity of the magnet is then introduced into the pharynx, and passed behind the base of the tongue towards the larynx, until it is brought in contact with the tube; it is then necessary only to withdraw the magnet with the tube attached. The proceeding is instantaneous and extremely easy. No special knowledge is required by the operator. Collet describes it as specially serviceable in case of sudden obstruction of the tube, when there is danger of death from asphyxia. The metallic part of the instrument can be easily sterilized; the coil is protected by a rubber covering which can also be easily sterilized.

TREATMENT OF VASOMOTOR RHINITIS.

To reduce the swelling, Lubinski recommends the submucus injection of 6 to 10 drops of a 10 per cent. solu-

tion of zinc chlorid, the mucosa having been first anaesthetized with a 10 per cent. eucaïn solution. The canula of the syringe should be twice the usual length, and it should be slowly withdrawn while the solution is injected drop by drop. A wad of cotton which has been dipped in a 10 per cent. antipyrine solution, is then pressed against the puncture to prevent bleeding. The general health must be looked after. A generous diet, iron and arsenic, cold baths and exercise, a light massage of the swollen tissues, with an application covered with cotton that has been moistened with menthol paraffine (1.4 to 1.2 per cent.) for five minutes, twice or thrice weekly, are remedial aids, and often suffice in milder cases.

This method is only another of the many modes devised for the sub-mucus application of a strong caustic. That of Norval Pierce, which he calls sub-mucus linear cauterization, is probably a more exact means of accomplishing the same object.

CARBOLIC ACID IN RELAPSING TONSILLITIS.

Kramer recommends injections of carbolic acid into the tonsils, in cases where these glands are the seat of repeated attacks of inflammation. This treatment prevents recurrence. The tonsil is to be cocainized, and 1.2 cubic centimetre (eight minims) of a 3 per cent. solution of carbolic acid, by means of a hypodermic syringe, the needle of which is thrust through the anterior pillar of the fauces to the depth of about one centimetre. The injections which are given between the inflammatory attacks, are repeated every two or three days; six injections are sufficient. Kramer believes that carbolic acid acts by destroying the latent foci of pure micro-organisms that remain in the tissue of the tonsil and which cause fresh outbreaks of inflammation.

NASAL HEADACHES.

Bronner thinks that if a careful examination of the nasal cavities were made, many of the chronic so-called incurable headaches would be relieved. Nasal headache is often neuralgic in character, and always worse in the morning, whereas headache due to eye strain is always

better in the morning. Nasal headache may be chiefly supraorbital or postorbital, and is sometimes felt at the top or back of the head, being more commonly diffuse in nasal obstruction. Dizziness is a frequent accompaniment.

HYPERTROPHIC RHINITIS.

This disease is growing quite common, and its treatment should be looked after carefully. Robertson concludes as follows:—

1. The utter uselessness of treating a growth of organized tissue in the nostril by the application of sprays and galvano-cautery.

2. Where such growths exist, treat as you would an overgrowth elsewhere.

3. Save all the venous sinus tissue, possible, and still secure breathing space enough.

4. The advantage of supra-renal extract in nasal surgery.

5. The absence of danger of synechiae forming, as they often do after the use of galvano-cautery or caustic.

6. The use of dry pledgets of cotton and the disuse of all fluids.

7. The great advantage of greased gauze as a surgical dressing in the nose, over old methods.

8. The danger in the use of cocaine lessened by the use of supra-renal capsule extract.

9. The disappearance of naso-pharyngitis after the nose becomes ventilated.

Griffin, of New York, refers to the difficulty of getting patients with hemorrhagic diathesis, to acknowledge the fact, if they think an operation is going to relieve them of their sufferings. One case cited, where life was finally saved after extreme efforts, the patient confessed a family history of this diathesis, but was anxious for operation, and took the chances.

DIAGNOSIS OF DIPHTHERIA.

Fussel, of Phila., constantly carries in his pocket a tube of blood serum, and makes a culture of every throat in any way suspicious. His reasons for doing so are the

following:—1. True cases of diphtheria may have few or no clinical symptoms. 2. Tonsillitis or pharyngitis may have severe symptoms and be serious, but not true diphtheria, and, consequently, not able to transmit diphtheria. 3. A diphtheric exude may be easily detached and leave no bleeding surface. 4. An exudate from some other organism may be a true membrane impossible to detach from the mucus membrane.

HEMORRHAGE FOLLOWING ADENOTOMY AND TONSILLOTOMY.

Roy, of Atlanta, gives the history of two cases of this character. The first occurring shortly after the removal of a small piece of adenoid tissue. There was no history of hemophilic diathesis, but the menstrual period was due, and it was thought to be a factor in producing the bleeding, for, after hemorrhage stopped, the catamenia appeared freely. The second case was after the removal of one tonsil only, and bleeding did not appear until five hours after operation. This is very unusual at the age of the child (four years), where no family tendency in this direction was ascertainable.

CORRECTION OF SADDLEBACK NOSE BY INJECTION OF PARAFFIN.

H. Smith reported three cases for the correction of nasal deformities, and while not resulting in a perfect nose, the results were much better than the usual methods employed. The technique of the operation was described, and no inflammatory reaction followed.

TUBERCULAR RHINITIS TREATED BY RONTGEN RAYS.

Case shown by L. Lawrence. The applications were from seven to ten minutes. Result, abatement of symptoms, reduction of swelling of the nose, pain gone from eyes and forehead, and a more comfortable feeling generally.

NOTES FROM THE CASE BOOK OF A GENERAL PRACTITIONER.

By FRANCIS W. CAMPBELL, M.D., L.R.C.P. L., D.C.L.

Dean and Professor of Medicine, Faculty of Medicine, University of Bishop's College.

COUGH.

It is not always an easy matter to decide upon the cause of a cough, and, therefore, sometimes a difficult matter to relieve or cure it. Many patients go about their work, appear in excellent health, and yet suffer more or less from a persistent irritating cough. Examination of the chest in these cases does not show anything abnormal in the respiratory murmur. Examination of the throat often reveals an elongated uvula which is frequently cured by a simple astringent gargle, and the cough disappears. Again, examination reveals congestion of the vocal cords, and a soothing inhalation of a teaspoonful of compound tincture of benzoin in a teacup of hot water, frequently causes the cough to be relieved in a short time. But the general practitioner, especially during the winter or spring, meets with a great many cases of cough, the cause of which he cannot fathom. He calls it an irritating cough, but the cause of the irritation is a mystery. Experience will soon show that it is irritating to both the patient and physician. To the latter because he finds that it continues in spite of his best efforts, and at last the patient drifts from one physician to another without getting relief. Eventually he takes his case in his own hands, and buys from druggists some of the numerous cough remedies they have for sale. Still no relief, and he finds his stomach thoroughly out of order because opium has been a constituent of the quack mixtures he has taken. Nature, the *vis medicatrix naturae*, possibly comes to his aid, the cough disappears, but no thanks to his doctor or his own prescribing. This is a brief sketch of what I know occurs to hundreds of physicians, as it certainly has to me. Among the late remedies for this class of cases is heroin, and it certainly has proved a valuable addition to our *materia medica*. There are many combinations in use of which

heroin is the chief constituent. Some, in my opinion, are not to be recommended for general use. What is needed is a safe and efficient preparation whose action is positive and definite. Such a combination we have in glyco-heroin, made by Martin H. Smith Co., of New York, to which my attention was drawn about a year ago. Each drachm of this mixture contains heroin, gr. 1-16; ammonia hypophos, gr. 3; hyoscyamus, gr. 1; white pine bark, gr. $3\frac{1}{2}$; balsam tolu, gr. $\frac{1}{4}$; glycerine, ad. $\mathfrak{z}\text{i}$. The astringent properties of white pine bark are of peculiar service in inflammations of the respiratory tract. It also is of use in arresting the night sweats of phthisis. Balsam of tolu is an aromatic stimulant useful in chronic bronchitis or in the advanced stage of the acute disease. Altogether, this mixture has, in my hands, proved to be of the greatest value, and at least a dozen of my medical friends to whom I have recommended it, are loud in its praise. I give below the report of a few out of many cases in which I have used it. I may state that the first case is that of the writer.

Case I.—F. W. C., aged 62 years, general health good. On the 23rd of January, 1901, about 10 p.m. visited one of the worst fires Montreal has had for years; was exposed to great heat for about fifteen minutes, when he left to return home. Had to stand some minutes waiting for an electric car, and found that the body, which had been perspiring freely, began to feel chilly. On reaching home lighted a cigar, but, before smoking half of it, was seized with a very severe rigor. Went to bed, and the rigor lasted at least twenty minutes when it left—no perspiration followed. Passed a restless night, and, in the morning, feeling quite ill, sent for a medical friend, who found my temperature 102, pulse 100, respiration 28, and evidence of commencing pneumonia in the anterior part of the right lung. It is needless to follow the case minutely. Briefly, the whole anterior portion of the right lung became involved, and the inflammation extended to the hepatic peritoneum. It was a serious condition for a man of 62 years, and for several days the

outlook was ominous. But a good constitution, good treatment and splendid nursing brought about a favourable termination. There, however, remained an irritative spasmodic cough without expectoration, which was most annoying as it disturbed sleep, and, therefore, retarded convalescence. To relieve this condition a mixture containing a couple of drops of dilute hydrocyanic acid with half a teaspoonful of parogoric was prescribed with but little relief. I then prescribed for myself, changing the mixture several times, getting some relief from day attacks, but at night the cough was bad as ever. Seeing in one of my medical journals an advertisement of glyco-heroin I sent for a sample to New York, as it was not to be had in any drug store in Montreal. I soon received through the Post Office four ounces, and within forty-eight hours very marked relief ensued, and by the time I had used the four ounces I was almost well. Four ounces more completely cured me. I have kept a bottle of it in my house ever since, and two or three times during the year a threatened return has been promptly relieved by two or three doses of a teaspoonful, which is the proper quantity for an adult.

Case II.—Miss A. P., about 24 years of age, has been a patient of mine all her life. For the last four or five years has every spring been attacked with a spasmodic cough which lasted from two to three months which I failed to relieve. Thinking possibly that there might be trouble in the throat, beyond my view, which might be the cause of the cough, I sent her once to Dr. Birkett, throat specialist. He reported that his examination was negative. The cough as usual continued till the weather became very warm. Last spring she consulted me for the same cough, and told me very candidly that if I failed to relieve her she would try some one else. I prescribed glyco-heroin four ounces, and before she had finished it she was completely cured. She, so far this spring, has had no occasion to consult me.

Case III.—J. L. F., a physician (specialist), consulted me in August, 1891, for a hoarse spasmodic cough, which

was most aggravating both by night and day. He feared whooping cough, as his sister's children, who resided in the same house, were all down with the disease. I prescribed for him four ounces of glyco-heroin. Within a few days he reported to me that he was fifty per cent. better. I think that he repeated the same quantity twice, by which time he was practically cured.

Case IV.—F. I. B., aged about 58 years, an old soldier, now employed as watchman in a Safe Deposit Company. Has been a patient of mine for the last 18 years. Is asthmatic, but the attacks are not frequent. Has had repeated severe attacks of acute bronchitis. In December, 1901, sent for me—diagnosis, acute bronchitis. Bronchial *rales* all over anterior and posterior chest. Cough severe, expectoration characteristic. Ordered croton oil liniment to chest, front and back, and gave a mixture of vin ipecac, vin antimon, tinct. of aconite and syrup of squills. For five days this treatment was followed without the slightest improvement to any of the symptoms. I then prescribed glyco-heroin. The following day when I made my visit the patient exclaimed on my entering the room, "Doctor, why did you not give me that medicine before? It has given me immense relief." And so it had; the cough was greatly diminished, the expectoration much less. Before he had finished a second four ounces I allowed him out of bed, for he was practically convalescent.

Case V.—W. McG., aged about 65, consulted me in January, 1902, for a persistent irritative cough which had persisted since October last. He had been under the care of his family physician without relief. I placed him on glyco-heroin—a four-ounce mixture cured him perfectly.

I have brief notes of at least a dozen such cases in which marked relief followed the use of glyco-heroin (Smith), but the above will suffice to show that in it we have a most valuable therapeutic agent.

Dr. George Hall, of Point St. Charles, Montreal, whose attention I drew some months ago to glyco-heroin, sends

me the following brief notes regarding its use in his hands:

1. In three cases of tuberculosis, where the cough was very troublesome, especially during the night, $\frac{z}{i}$ dose of glyco-heroin (Smith) was given before retiring. Not only was the sleep better, but the "night sweats" were diminished in severity and the sputum more easily expelled on rising.

2. L. L., Aet. 17.—*Acute Laryngitis*.—Commenced coughing at 11.20 p.m., coughed almost incessantly until 1.20 a.m. (2 hours), $\frac{z}{i}$ glyco-heroin given, cough ceased in about ten minutes, and patient slept until 7 a.m. without coughing once in the interval.

3. Two cases of chronic bronchitis, treated with the usual remedies for about four weeks, with little benefit. Glyco-heroin given in $\frac{z}{i}$ doses every fourth to sixth hour, expectoration was freely established and cough subsided. At the time of writing both cases are apparently cured in one case, one month has elapsed, in the other two months.

4. J. F., Aet. 6.—*Whooping Cough*.—Five drops of glyco-heroin every third hour relieved the paroxysms, the duration of the latter were shorter and farther apart.

Cancer in the Male Breast.—Cancer is a rare disease in the male breast. I have only seen, in forty-nine years, three cases, one in the Montreal General Hospital when I was a student, where the breast secreted small quantities of milk, and was removed by the late Dr. Crawford. The second I saw in 1861 at King's College Hospital, London, the breast being excised by the late Sir William Ferguson. The third case occurred in my own practice, and I will briefly relate it. All were cases of true scirrhus. I regret I was unable to keep track of any of these cases, so cannot say whether the disease returned:

H. G., aged 23, French Canadian, and previously employed as a farm labourer, was examined by me in February, 1885, as a recruit for the Royal Canadian Regiment (St. Johns, Que., Depot) and passed. His height was 5 feet 6 inches and his weight 145 lbs. In the early summer of

1887 he complained of the straps of his knapsack hurting his chest. I examined him carefully and found the left breast somewhat enlarged and tender to the touch. I had him exempted from any duty requiring his wearing the pack and watched the result. The tenderness became less, but, by the autumn, he complained of sharp lancinating pain in a distinct hard nodule about the size of a large walnut. I decided to remove the breast, which I did in November. I opened well into the axillæ, but did not find the glands involved. The wound healed rapidly, and he was discharged from the Regimental Hospital the end of November. As his term of enlistment expired in February, 1888, he did not re-engage, and I never saw or heard of him afterwards.

PROCEDURE IN POST MORTEM MEDICO-LEGAL EXAMINATION.

By CHARLES A. HEBBERT, M.R.C.P., London.

Professor of Anatomy, Bishop's College.

Case 6.

This was a case of a young girl found in the River Charles, Boston, with evident marks of violence on the body.

The body was that of a young girl aged 14 years, 4 feet 6 in. high, well nourished and developed, black hair, brown eyes, pupils dilated, tongue protruding and clenched between the teeth with some frothy mucus on the lips; the lips were swollen and discoloured. In the mouth was some mud and sand. The right side of the face was much swollen and discoloured, the lower lid showed a small lacerated wound and there was an ecchymosis on the right cheek about 3 in. in diameter, somewhat irregular in outline.

Both arms showed similar marks of violence. On the anterior and inner surface of each arm, $1\frac{1}{2}$ in. above the elbow, was a round dark bruise and on section showed extravasation of blood into the muscles beneath. On the extensor aspect of each arm were four small bruises each about $\frac{1}{4}$ in. wide and $\frac{1}{2}$ in. long, and separated from each other by about $\frac{1}{4}$ in. Similar marks were found along the outer and posterior aspects of the thigh and a larger bruise on the

inner aspect of each thigh about 2 in. in width and irregular in shape. The left side of the vulva also showed bruising, and the inner side of the left *labium majus* was ecchymosed; the hymen was intact. It may be stated here that the girl had worn drawers fastened at the side, but old and ragged at the lower part in front.

Decomposition was commencing at the upper part of the trunk and neck. Hypostasis was remarked on the back of trunk and limbs.

THE INTERNAL SECTIONS.

Head, Scalp.—Showed no bruising. The *bones* were of a fair thickness and there was no fracture of the skull.

Brain, Membranes.—The sinuses full of dark fluid blood. The pia mater congested. Vessels normal. *Substance of brain* apparently normal and there were a number of puncta cruenta noticed on section.

Thorax and Neck.—The larynx and oesophagus both contained some mud and sand. The mucous membrane of the larynx, trachea and bronchi was swollen and congested, and was covered by bloody frothy mucus. The lungs were large, prominent on opening the cavity and were much congested, and bloody frothy mucus exuded on pressure.

Heart, Pericardium.—Contained a small quantity of fluid (blood stained.)

The *cavities* of the right heart were distended by black fluid blood and some black clots. The left side contained a small quantity of blood clots. The *muscle* was of a good colour and consistence. *Valves* normal.

Abdomen, Stomach.—Contained some partly digested food of prunes and milk and some dirty fluid, about one pint in all.

Intestines.—Normal.

Liver.—Substance normal, some congestion of organ.

Spleen.—Similar report.

Kidneys.—Similar report, capsules were adherent.

Pelvis.—*Uterus* $2\frac{1}{2}$ in. long, virginal.

Ovaries.—Normal, no corpus luteum.

The *vagina* was narrow, rugose and showed no other marks of injury but that described at the orifice.

Comment.—The two questions to be answered in this case were: first, the cause of death, and secondly, what were the probable causes of the bruises and, how far were they to be considered in the decision as to the death.

It was clear that the death was due to the suffocation by drowning. The bruises had been inflicted before death; the one on the face having evidently been caused by a very heavy blow by some blunt instrument such as a clenched fist. The marks on the arms were such as might have been made by the forcible grasp of the hands. The somewhat linear character of those of the extensor aspect suggesting that the fingers had partly slipped from the first grip. The marks on the thighs suggested the forcible separation of the thighs, the position and size being such as might be made by the knees. The marks on the vulva and *labium majus* were made by a blunt instrument, but there was no penetration of the vagina and no rupture of the hymen, the attempt at rape being evidently frustrated in part by the closed drawers. The whole picture of the case certainly seemed to suggest that the child had been assaulted from the front with a view to rape and in resistance had been stunned by a violent blow on the face and then thrown into the river while alive and died of drowning.

Selected Articles.

OBSERVATIONS ON SEVEN YEARS' USE OF CREOSOTE IN PNEUMONIA.

BY J. L. VAN ZANDT, M. D., FT. WORTH, TEXAS.

When I left college in 1856 I had been taught that the proper treatment of pneumonia was by means of blood letting and tartar emetic in the first stage, and, later, calomel and blistering. Nothing or but little was said of the *vis medicatrix naturae*, and when Jim Miller, about four miles north of Dallas, got well, I congratulated myself that I had

cured one case of pneumonia.

Within a year or two I read a work on "Practice," by J. Hughes Bennett, of Edinburgh, in which he laid great stress on feeding and gave but little medicine, but yet his mortality was much less than I had seen elsewhere reported. Later, I read a little work, "Nature and Art in Disease," by Sir James Forbes. Then it dawned on me that a large per cent. of cases would get well with or without medicine if he could only keep them alive long enough. In other words, pneumonia was a self-limited disease and would run its course if not interrupted by death.

It is true I gave medicine from the beginning of the attack, hoping to modify the disease, though I had no hopes of aborting it or materially shortening its course. For a long time I gave carbonate of ammonia to all cases, and, later, except in asthenic cases I gave salicylate of ammonia. I believe the disease was distinctly modified by these remedies. Not until long after I began the use of salicylates of ammonia did I know that the salicylates had been vaunted as a specific in the disease. I did not give in sufficient doses for this and so got only a modifying effect. I believe that measles was about as amenable to an abortive treatment as was pneumonia.

So you will see I was not looking for a cure for pneumonia when I gave creosote to my first case, one with an enteric complication, and was as much surprised as anyone at the result.

A shrewd aunt of mine said, when I was a small boy, that I would learn better from observation than from books. From books I learn that pneumonia is a self-limited disease and must run its course. From observation I learn what is "better," that in a large per cent. of cases creosote has a decidedly curative, I might say, an abortive effect.

In a former paper (*N. Y. Med. Record*, March 30, 1901), I gave extracts from a number of writers who enthusiastically claimed the curative effects of creosote in pneumonia, also reported sixteen consecutive cases of my own, treated during the winter of 1899 and 1900, of which four were dismissed on the second day, five on the third, and one on the fourth, (10 or 62½ per cent. by the end of three days), one each on the fifth, sixth, seventh and eighth, and two on the tenth days. Since that time I have lost only one case; that I shall mention later.

As further evidence on the curative effects of creosote. I will give some extracts from personal letters received since

my last paper was written. Prof. Andrew H. Smith, of New York, says: "I have long felt that in all probability, the pneumonia of crisis belonged to the infection with pneumococci, while lysis indicated a mixed infection. This applies, however, only to cases not treated with creosotal or other germicide. I believe such treatment is capable of causing an early lysis, before time for crisis arrives, say by the second or third day the fall would begin. I have seen many such cases, and have rarely seen a crisis when the remedy was begun early."

Dr. A. H. Davidson, of Boerne, Texas, says: "I saw your first report on creosote in pneumonia 1898 and since then have used it in all cases with good results."

Dr. Emma H. Yates, of Ander, Texas, says: "You taught us that creosote gave startling results in pneumonia, and I have certainly found it so. I have been agreeably surprised that my patients did so well. I seldom needed to make a second visit. At first I doubted my diagnosis when they recovered so speedily, but I could not confirm my doubts. I was positive the diagnosis was correct." Having to make long trips to the country, she says she left medicine with instructions to send report the next day, and reiterates that she seldom had to make a second visit. She had been practicing only two years and had only ten or a dozen cases, but had been well pleased with results in all.

May 11, about six weeks after the publication of my last paper, Dr. Geo. H. Sanborn, of Henniker, N. H., wrote to "personally thank" me for it. The day after reading the paper he sent to Boston for the carbonate of creosote, and in a few days was called to see a lady æt. 45, sick two days, pulse 120, respiration 40 and temperature 105, with rusty sputum. He gave creosote carbonate and went back next day and dismissed his patient, thinking he had made a mistake in diagnosis. He was called back the same evening to find the symptoms as bad or worse. He resumed giving the creosote and had a speedy recovery. Further, he says he had treated three other cases, all getting well, in a very short time. The last case was a man 50 years old, temperature 105, respiration 50 and pulse 140, "raising large quantity of rusty sputum." This was the evening of the first day's illness. He gave creosote, and at his visit the next morning the wife met him at the door and said: "Well Doctor, I guess you made a mistake about that being pneumonia. My husband is all right this morning and is hungry." The

Doctor, to use his own words, "did not propose to run any chances and did not omit the medicine," but continued it for three days at longer intervals, and the patient was at work in a week. He then goes on to contrast this with his former experience and with the teaching of the books.

It will be noted that my report of cases shows an unevenness of results, 25 per cent. of cases being dismissed on the second day, 21 per cent. on the third day, and yet 12½ per cent. went on to the tenth, though in all the protracted cases the disease was distinctly modified.

One writer says: "When given early in the attack the results are almost specific." While admitting the beneficial effects of early giving I have seen as decided effects when given later, on all symptoms save the colour of expectoration, as when given early. It has occurred to me, from my own and the observation of others, that the difference of results was due not so much to the time of giving as to the difference in the infecting micro-organism. I have been impressed with the idea that the pneumococci infected were the most amenable to treatment, but a lack of microscopical equipment has prevented me from putting this impression to the test.

Since I began using the *carbonate* of creosote, October 29, 1899, I have had but one fatal case of pneumonia. That was April 7, last, and to that patient the carbonate of creosote was given early and freely and seemingly with no effect whatever. This case, while in a measure having the appearance of an ordinary attack of lobar or croupous pneumonia, had some very peculiar features. He was taken with a chill about 3 a.m. I saw him six hours later. He had pain in the side and cough and was expectorating a rust-coloured sputum. I diagnosed a pneumonia, but did not at the time locate the pulmonary lesion. Later, however, I found the posterior part of the left lung involved from top to bottom, while the anterior part and the whole of the right one seemed to be entirely free from disease. These conditions continued throughout the attack, which lasted almost twenty-one days. All this time could be heard posteriorly tubular breathing, associated with fine and coarse crepitation. The expectoration varied very little.

The conclusions I have reached are these: A large per cent. of pneumonic cases are cut short or aborted, almost all the rest are mitigated, and the remainder, a very small per cent., are not at all affected by the remedy.

I have been thus particular to dwell on these unfavourable cases for two reasons. Honesty requires it, and should

one of you who has not already done so, be disposed to try the creosote and find first one of the non-yielding cases, he might be disposed to discredit the whole thing.

As illustrated in Dr. Sanborn's first case, it has been found that the medicine must not be omitted so soon as active symptoms have subsided, because there will almost surely be a recurrence, as I have known quite a number of times. The medicine should be continued in less quantity or greater intervals for at least three days. In broncho-pneumonia a longer time is generally better.

A few words with regard to the particular preparation and dose : My original formula was made by adding one drop of creosote to my then common dose of seven and a half grains of salicylate of ammonia. This combination I continued to use in most cases till 1899. In some creosote was given without the salicylate, because of great prostration or gastric irritability. I lost, as I now remember, two cases of my own, and two turned over to me "in extremis." Some of these I think might have been saved by my present medication.

In 1899 I read an abstract of a report of a case treated with carbonate of creosote, by Cassoute, of Marseilles, France, and as it furnished an easy and pleasant way to increase my dose of creosote, I at once adopted its use and have found no difficulty in giving it in any desirable dose to any patient. It is almost devoid of taste and odour and may be given in emulsion or stirred in hot sweetened water to be taken during agitation as it does not dissolve. The emulsion is an ideal way particularly for small children. Do not mix with alcohol or acids, as these will develop the taste and odour of creosote.

It may be asked, may not guaiacol or its carbonate be used instead of carbonate of creosote. I think not. Thinking to test the matter I gave thiocol, a preparation of guaiacol, in one case, but my patient grew steadily worse as the disease advanced, until, after about three days, I substituted carbonate of creosote, and in twenty four hours a marked mitigation of symptoms occurred. I have not half the courage or disposition to experiment further.

Dose : To an adult I have been in the habit of giving seven and a half to ten grains or minims every three hours, in urgent cases giving the dose more frequently for a few times. Some have recommended one dram night and morning, while others have put the daily amount at two and a half to

three drams. Dr. Sanborn, whose report of cases I have given, gave one drop every hour. It may be that some of us are giving more than necessary and that better results may be had by giving smaller doses at shorter intervals. In some cases I formerly got good results from one drop of creosote alone every three hours.

Ordinarily, I use the carbonate of creosote without other medication. I never use expectorants or nauseants. Occasionally, a few doses of some anodyne are given in the beginning of painful cases, and strychnine where indicated.—*The Medicus*, Feb., 1902.

RELIEF OF PAIN IN NEURALGIC CONDITIONS.

By E. H. Sickler, M.D., New Baltimore, Mich.

When called to treat a case of acute neuralgia, whether of purely nervous origin, or resulting from traumatism, or of a malarial rheumatic, or gouty character, or a manifestation of auto-toxemia, the most important factor from the patient's standpoint is the relief of the pain, which is usually of an excruciating character. In trigeminal neuralgia the suffering produced is sometimes well-nigh unendurable. In sciatica it radiates from the hip to the knee or heel of the affected limb, making either walking or the sitting posture impossible. In the intercostal form the pain will shoot from one intercostal nerve to another. Occasionally, the pain may be of a nagging kind, a twinge of pain in the hip on moving the limb, but this mild form is quite unusual.

To effect a positive cure in cases of neuralgia it is necessary to submit the patient to a thorough examination, and to discover as far as possible the real cause of the pain. The presence of a uric acid diathesis, of chronic malaria, of kidney disease, of digestive disorders, or of a simple neurotic tendency, will all afford valuable clues as to the method of treatment to be adopted. For the immediate relief of the pains morphine has been the most extensively used, and, it may also be said, abused remedy. While a blessing in some cases it has been a distinct curse in others, by setting up a habit from which the unfortunate victim has found it most difficult, if possible at all, to extricate himself. Local applications, such as the use of heat and cold, of counter-irritants, and electricity, may be resorted to with more or less benefit in connection with the internal use of analgesics.

Among these I have recently found in heroin hydrochloride a drug which surpasses morphine in some important

respects. Morphine, even when given hypodermically, has the inhibiting effect of opium on the unstripped muscular fibers of the intestines, restraining bowel movements. This we know is contrary to what is most desired in neuralgias of gouty or rheumatic character—that is, the prompt elimination from the blood of all deleterious substances which are causative factors in producing the conditions from which the neuralgia results. Heroin hydrochloride does not have this effect on the intestines, and is not followed by the headache or nausea produced by morphine. The use of heroin is not attended with any cerebral manifestations; it is simply analgesic, and, to a lesser degree, hypnotic. Moreover, its continued administration does not give rise to any craving.

The following cases will show its mode of action in painful conditions:

CASE I.—E. J——, aged thirty-five years, married, sailor, is not only exposed to inclement weather, but is also a moderately heavy alcoholic. He is a heavyweight (220 pounds). He has had attacks of sciatica lasting from two to ten weeks for the past five years, generally in winter. The present attack began January 15, 1901, and since then he complained of excruciating pains in the left leg, running from the hip to the heel along the great sciatic, lesser sciatic, and short saphenous nerves. Locomotion was impossible. Temperature $99\frac{1}{2}^{\circ}$; pulse 82; urine normal, except for hyperacidity and brick-dust (amorphous urates) deposit on standing. Apparently he was lithemic. I placed him on a rigid vegetable diet, forbade all liquors, applied hot bran bags along the limb, gave him a diuretic, a cathartic, and lithium citrate tablets, grains 5, every four hours. I also ordered tr. aconite, tr. iodine, and tr. opii, to be painted over the affected area. Morphine sulphate, $\frac{1}{8}$ grain, was administered subcutaneously, and some $\frac{1}{8}$ grain tablets of the drug left with the patient to be taken if necessary for the pain, as he lived some distance in the country. On January 17 I found him in about the same condition as at the previous visit, except that the pain was less severe, which was due to the fact that he had taken all the morphine (six $\frac{1}{8}$ grain tablets). His bowels had not moved. Seeing that something else had to be done I withdrew the morphine, and gave him heroin hydrochloride, 1-12 grain, for the relief of the pain. Another cathartic was administered, and the previous medication continued. On January 19 he was much brighter. Heroin hydrochloride had controlled the pain very well; the bowels had moved, and there was very little

sensitiveness to pressure along the affected nerves. He could also move the leg to some extent. All previous medication was continued. On January 21 I found him sitting in a chair, and with the exception of an occasional twinge in the hip he felt very well. The temperature and pulse were normal. The lithium citrate was continued, as his urine was still hyperacid. He had not been compelled to take any of the heroin hydrochloride for the last twelve hours. In ten days he was around again, and has since had no repetition of the attack.

CASE 2.—T. N——, married, aged thirty-five, farmer; previous health good. On February 13, while drawing ice, he exposed himself to great cold by sitting on a block of ice which was covered with a little straw. On February 15 he awoke with severe pains, radiating from the right hip to the heel. On examination I found the great and small sciatic nerves painful from the gluteal region to the knee. Temperature 99°; pulse 76; urine normal. Diagnosis: Sciatica due to excessive cold. I gave him a laxative; applied hot bran bags to the leg, and administered two doses of 1-12 grain heroin hydrochloride hypodermically, injecting at different points along the greater and smaller nerves. In addition to this I left a few doses (1-12 grain) of the drug in solution. Before my departure he felt much relieved. On the 16th his wife came to my office, telling me that he was greatly improved, and only had a slight soreness in the hip. A few days after this the patient presented himself at the office, and expressed himself as cured.

CASE 3.—Emma G——, aged twenty-eight, has been a chronic invalid for the past ten years. I was unable to obtain a clear early history of the case, but my examination showed a probable reflex irritation of the spinal nerves due to utero-ovarian disorders. One of her first physicians put her in a plaster-Paris cast (jacket) for spinal curvature (?). She has become so accustomed to this support that she thinks she is unable to walk without it. As the results of the constant wearing of this hard plaster cast there has arisen an irritation of the intercostal nerves. This occasionally flares up into a severe intercostal neuralgia. In a patient of nervous temperament, especially in an invalid, it is obviously the better way to attempt to control the pain without the use of opiates. This has sometimes been impossible, and morphine has been given. Since my success with heroin hydrochloride in sciatica I have used this remedy in her

case with the best results, and have obviated any risk of establishing a pernicious drug habit.

In Cases 1 and 3 it is conclusively shown that heroin hydrochloride is much safer and as efficient an analgesic as morphine. In Case 1 especially is the result striking, for in previous attacks the patient had used a great deal of morphine without permanent benefit, and the attacks lasted longer. It is well for physicians to look forward to the patient's future, especially so when prescribing morphine for neurotic persons. Moreover, I can recall no previous cases of neuralgia, sciatica or otherwise, treated with morphine, in which the results were as satisfactory as in these two cases. —*Medical Age*, January 25, 1902.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

HEREDITY IN ITS RELATION TO IMMUNITY AND SELECTIVE ACTIVITY IN TUBERCULOSIS.

H. M. King (*Med. Record*, vol. 60, no. 15, *Memphis Medical Monthly*), thus summarizes the result of observations in a series of cases:

(a) Of two hundred and forty-two consecutive cases of phthisis, approximately one in every four gave a history of phthisis in the parents. (b) Nearly one in three gave a history of previous phthisis in a brother, sister, or both. (c) More than two-thirds of those giving a history of previous phthisis in brother, sister, or both, had non-phthisical

parents. (d) As a rule, in the incidence of individuals of phthisical parentage afterward developing phthisis, a much longer period was found to exist between supposed exposure to infection and the subsequent appearance of the disease than was the case in the incidence of those giving a non-phthisical heredity. (e) Of one hundred and three fatal cases of phthisis, the average length of life after development of the disease of those giving a history of phthisis in the parents was to that of individuals of non-phthisical parentage approximately as four to three.

The following conclusions naturally follow:

1. The percentage of consumptives having a tuberculous parentage is actually smaller than that having a non-tuberculous parentage, and much smaller than would be more than accounted for by the additional risk of infection to which the former class is subjected.

2. Tuberculosis in the parents renders to no inconsiderable extent an immunity to the disease in the offspring, an immunity which, of course, is but relative and not sufficiently protective, but still demonstrable, as is shown by increased resistance to the progress of the disease and increased tendency to recover among this class.

SANTONINE.

This drug, which has generally been looked upon only as reliable anthelmintic and very seldom thought of except in certain forms of verminous trouble, is now found to possess a much wider range of action and to be of special value in the treatment of epilepsy and the pains of locomotor ataxia. The physiological action of this drug is markedly upon the nervous system; taken in large doses, producing great weakness, tremor, perspiration, coldness of the extremities, vomiting, and not infrequently quick, sharp convulsions, terminating in death from paralysis of respiration.

The effect upon the vision is very marked; at first, everything appears blue, which speedily turns to a greenish yellow, which may be followed, if large doses have been taken, by total blindness, lasting a week or more. The physiological action of this drug is so marked in its effect upon the nervous system that we obtain a clue to a remedial agent of great power in influencing general changes of nervous sensibility; In its action we have an excellent reproduction of the symptoms of epilepsy and the pains of locomotor ataxia, and Lydstone claims that he has obtained better re-

sults from it in epilepsy than from the bromide treatment. The dose recommended in these cases is two grains three or four times a day, gradually increasing to fifteen grains at a dose, if that amount is well borne. In the fulgurant pains of locomotor ataxia we have given two grains three times a day with better results than from any other drug, the pain almost entirely disappearing while under its influence. Studying the action of drugs, from the dual standpoint, there can be no doubt of the wide range of action of santonine on the nervous system and its great value in many other diseases.—*New York Med. Times.*

ARSENIC.

Dr. T. C. Simpson, of Louisville, contributes a practical article in the use of arsenic to the *American Practitioner and News*. We take the following extracts from it:

Arsenic is one of our most valuable medicines, and one that is not as popular as it should be among the profession generally. Many practitioners who do not see much of skin diseases seem to have an idea that arsenic is a remedy which can be administered in almost every lesion of the skin with advantage, and fail to recognize that, as a rule, it is contra-indicated whenever the layers of the skin are inflamed, being most useful when the epiderm is dry and improperly nourished, and of very little use when the corium is inflamed. Psoriasis is a typical disease of the former class, and in its treatment arsenic is a standard remedy. As stated above, the medicine should not be prescribed during the inflammatory stage of a skin disease. When used, it should be kept up for weeks, even months. Dr. Hare calls our attention to the use of arsenic as a valuable appetizer in doses of a minim of Fowler's solution with ten grains of bicarbonate soda and a tablespoonful of infusion of gentian before meals. I have used it this way and certainly found it a very valuable tonic. It is also useful in certain forms of morning diarrhoea and nausea; also it is valuable in the treatment of various forms of anaemia, in which case it must be given over long periods.

It is hardly necessary to remind you that it is almost a specific in the treatment of chorea, and its value as a blood tonic in malaria, and its great value in diabetes and asthma. It is held by Murray and others that it is useful in those asthmatic cases which are young, and the old with marked emphysema. It is also valuable in cases that have nasal disorders due to hyperemia of the respira-

tory mucous membrane. While recognizing the value of arsenic, we must not forget that it is possible for it to produce evil influence; that it is capable, when administered too long a time in large doses, of causing pigmentation of the skin, irritation of the stomach and of the respiratory tract, and, more serious still, peripheral neuritis.

In the treatment of chorea I find it of the greatest value. You must use it in increasing doses, and this is one of the few diseases in which arsenic is so valuable that you have to give it in ascending doses, even to tolerance. I find it of the greatest value in anemia; even the obstinate and often incurable cases of pernicious anemia yield better to arsenic than to any other known remedy; it is to be given in small doses and kept up for months. In the small dose you are not so likely to produce stomach disturbances. The effect of the drug in this disease is not due to its increasing the number and quality of the red blood corpuscles, but rather to its preventing or delaying their destruction in the portal circulation. By timely use of laxatives and carefully watching the dosage, you may easily adjust the blood-making forces.

TREATMENT OF MIGRAINE.

The writer leans to the view that migraine in the majority of instances is of toxic origin. He rejects the theory that it is a degenerative neurosis. The largest number of cases are among brain-workers and those following sedentary occupations. Sailors, truckmen, and others who lead an outdoor life associated with muscular exertion, are almost exempt. From this he argues that in migraine there is usually a passive congestion in the portal circulation. This leads to fermentation in the intestine and absorption of toxic products, with the development of the explosive headaches. The marked hereditary element in these cases is explained by the theory that all disorders of the alimentary tract have a tendency to pass from parents to offspring.

With these views of the origin of migraine the writer readily arrives at a method of treatment which aims at restoring the general tone of the nervous system, developing the muscles, improving the circulation in the abdomen, and so far as drugs are concerned, administering intestinal antiseptics with cathartics. In prophylaxis all cases should be regarded, without exception, as chronic dyspepsia, one of the commonest symptoms of which is constipation. The mercurial laxative should be given at least

every week. This should consist of a five-grain blue pill at night, followed by a saline in the morning. In addition, one to two drachms of sulphate of soda with ten grains of sodium salicylate is to be given in a tumbler of hot water, sipped every morning on arising. Half an hour before each meal a pill is taken containing one-twentieth of a grain of bichromate of potassium, with three grains of bismuth subcarbonate half an hour after meals. At night a full dose of an intestinal antiseptic, ten grains of phenol bismuth or ten grains of ammonium benzoate or sodium benzoate, is given in two capsules. Sometimes when the intestinal derangement takes the form of diarrhoea, the above prescription is quite as useful as in those cases in which there is constipation.—W. J. Thomson, *Med. Rec.*

BRONCHIAL AFFECTIONS IN GOUT AND OBESITY.

By Dr. J. Anders, of Philadelphia (*Med. Soc. State of Pa., St. Louis Medical and Surgical Journal*).

Although the pathogenesis of the abnormal conditions in the lungs in obesity is not clear, it can be assumed that the deposit of fat in the body plays a mechanical part. He describes the symptoms concurrent with over-fatness, namely, pain in the subscapular and intrascapular muscles, more marked when the patients make an effort to maintain the erect posture. The physical signs vary, but, as a rule, tactile fremitus and percussion notes are enfeebled on account of the abnormal deposition of fat. There is a weakened vesicular murmur, although in rare instances the murmur may be exaggerated. Among the adventitious sounds are moist rales, although the author has also observed whistling sounds, the presence of mucus, however, predominating on auscultation. The author discussed asthma in obese subjects and the theories of its cardiac origin. Asthma in corpulency is due to the high position of the diaphragm in individuals who overfeed. There is good reason to believe that hepatic inadequacy may be a cause. He believes that the severe paroxysmal dyspnoea in asthma can be helped by assuming the erect posture, as there is no characteristic sputum or vasomotor spasm in these conditions. The question of the relation of asthma to polysarcia is somewhat obscure, the author's conclusions being: (1) That asthma occurs in about five per cent. of the cases of obesity; (2) that it only occurs in extreme polysarcia; (3) that there is present a gouty state or history in most cases in which true asthma is secondary to the obesity; and (4) that about one-half of the cases are curable by overcoming the causative condition.—*Phil. Med. Jour.*

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.,

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

ON THE PASSING OF THE TREPHINE.

T. H. Manley, New York, records his objections to the trephine and his reasons for preferring the chisel. By using the trephine, sinuses may be opened; hernia cerebri may result; the serrations are cleansed with difficulty, and the operator is working in the dark.

In connection with the subject of vault fractures, he calls attention to a few things in connection with it of practical importance. (1). Make a large incision to freely expose the skull. (2). Leave all aseptic sub- or epidural coagula, however extensive, undisturbed. (3) Let all lacerations in the dura mater be securely closed with fine aseptic gut suture. (4) Reimplantation of trephine buttons of skull-bone invariably fails, and any procedure which will conserve the skull is of great advantage to the adult. In the child under fifteen years, as Ollier has correctly demonstrated, the periosteal layer of the dura mater will regenerate ample new osseous tissue to fill in a large breach. (5) Silkworm gut, or Crin de Florence fishgut, answers best for suture of the scalp; small wicks of aseptic gauze in the angles of the wound provide for ample drainage. (6) For antiseptic powder over the wound here, or indeed any scalp wound, nothing surpasses finely-ground fresh mustard.—*Kansas City Medical Rec.*

DIRECT INTRODUCTION OF PURGATIVE INTO THE LARGE INTESTINE IN CASES OF OPERATION FOR SEPTIC PERITONITIS.

A. M. Sheild calls the attention of the profession to a method which he believes is of great utility in the surgery of septic peritonitis—the direct introduction of purgatives into the intestines at the time of operation. It is not too much to say that in many of these cases the patient's life hangs on the possibility of overcoming the paralytic obstruction and the free evacuation of gas and feces. The worse the case the more difficult is this to bring about, since the patient vomits everything he takes by the mouth.

He has hitherto only used this method in cases of perforative appendicitis, and here the performance of the injection is very simple. The nozzle of a small syringe—the hydrocele-injecting syringe is a convenient form—is introduced into the “stump” of the appendix and the solution directly thrown into the cecum. Three drachms of magnesium sulphate, with ten drops of tincture nux vomica, and a drachm of glycerin in an ounce of water is the formula generally employed. Two hours afterwards a turpentine enema is given, and the result has been excellent. He has employed this method in five bad cases of septic peritonitis associated with perforative appendicitis. In every case the results were surprising. And though the number is too small for a pronouncement as to establishing intra-cecal purgatives as a definite line of treatment, yet the cases are sufficiently striking to justify him in urging a trial of it. It is obvious that in other cases the solution could be easily and safely thrown into the colon by means of a hypodermic syringe obliquely introduced. Further evidence may elicit better purgatives than magnesia.—*Brit. Med. Jour.*

THE SURGICAL TREATMENT OF ASCITES DUE TO CIRRHOSIS OF THE LIVER.

G. E. Brewer, New York, has collected from the literature 60 cases thus treated. The operation in most cases was that recommended by Morison, as follows: Under general anaesthesia open the abdomen and evacuate the fluid, then rub the upper peritoneal surface of the liver and the under surface of the diaphragm with gauze sponges until raw, freely-bleeding surfaces are produced. The same procedure should be carried out on the outer surface of the spleen and its adjacent peritoneal surface. Finally, stitch the great omentum to a freshened peritoneal surface on the anterior abdominal wall. A glass drain should be introduced to the lower part of the pelvis through a separate supra-pubic wound. The upper wound should then be closed and dressings applied. The fluid which collects in the pelvis should be frequently pumped out through the glass drainage tube for a week or ten days until the daily secretion is markedly diminished. The tube may then be removed and the wound allowed to heal. In reviewing the statistics furnished by this table, it will be seen that at least six cases have been cured of ascites by this procedure and have remained well for a period of two years or more; six others have been relieved of this symptom for from two to six months, but have

died, either without a return of the ascites, or have not been under observation long enough to demonstrate that the cure is permanent. Another case, that of a patient suffering from hemorrhages from the alimentary canal, was promptly cured by this operation, and a number of others have been materially improved. Thirty-eight have recovered from the operation, and, when we consider that in the great majority of instances these patients were in the last stages of an incurable disease, and if we are to accept the statements of White and Thompson, within a few weeks of an inevitable death, this fact should, the writer believes, encourage our medical friends to suggest the operation at an earlier and more favourable stage of the disease. If this is done the writer believes that later statistics will show a substantial improvement over those able at this time to present.—*Med. News, St. Louis Med Review.*

PERMANENCY OF CURE IN OPERATIONS FOR HERNIA.

The question of mortality in the radical treatment of hernia has been disposed of by the brilliant statistics of Coley, Bull, and others. Permanency of the cure after operation depends upon a small number of simple features. These are:

The wound must heal primarily. There must be immediate union without suppuration scars, and the least possible amount of cicatricial tissue.

The stitches should not be drawn tightly. This avoids pressure necrosis, which is liable to occur from the edema following an operation. It is possible that there is always a certain amount of pressure necrosis whenever a suture is used, but it is reduced to the smallest proportions by drawing the stitches just tight enough to place the tissues in apposition without causing pressure. A small amount of necrotic tissue will furnish a good culture medium and thus prevent primary union.

The edges of the surface to be united must be free from fat and other unstable tissues. No matter how perfect a union may be, if the attachment is to a tissue which has little resistance, the union is of no value. It is necessary to carefully dissect away the soft muscular or connective tissue, as well as masses of fat. For the same reason, blood-clots must not be allowed to interpose between the surfaces to be united.

The tissues should be manipulated with the greatest care during operation. The utmost care must be exercised to avoid rough handling. The less the tissues are disturbed, the better the primary union.

The wound should be supported by broad rubber adhesive plaster strips. This secures as perfect rest as is possible for the tissues, and favours a minimum of cicatricial tissue.

The patient should be kept in bed for two or three weeks. On this point there is a wide difference of opinion, but it seems reasonable to suppose that if an opportunity is given for the wound to become firm, there will be less likelihood of its giving way.

Abnormal intra-abdominal pressure should be eliminated. Constipation, strictures of the urethra, and enlargement of the prostate, as well as obesity, all favour increased abdominal pressure and should be eliminated by appropriate treatment.—A. J. Ochsner, in *Am. Med.*

NATURAL METHOD OF DRAINING THE PERITONEAL CAVITY.

In 1896 the writer suggested and began using the postural method of draining the peritoneal cavity. This consisted of introducing a liter of salt solution at the completion of an abdominal operation, and then elevating the foot of the bed for twenty-four hours. It is no longer thought necessary to elevate the feet, as absorption seems to be quite as rapid in the prone position. Aside from drainage, the introduction of normal salt solution into the abdominal cavity favours the movements of the intestines, and by being floated upward they are assisted in regaining their normal position. Since using peritoneal infusions, the writer has had no case of post-operative obstruction. The routine use of normal saline solution in the peritoneal cavity is free from danger, and is of great value in preventing general or local peritonitis. It prevents shock from loss of blood, and is one of the best general stimulants. Frequently when the pulse is 160 and weak, at the close of an operation, it will be found that within a few hours afterward the pulse has fallen to 120 and has become full and regular. Another marked advantage is the prevention of thirst and the stimulation of the urinary excretion. The effect upon the kidneys is the same, whether the infusion is made directly into the abdomen or a high saline enema is given. The average increase in the excretion of the kidneys in twenty-four hours, in those who receive salt solution, amounts to about 150 cubic centimeters. This dilution of the urinary excretion lessens vesical irritation, and catheterization after operation is much less frequently needed. The increased elimination tends toward the lessening of infection. The researches of Flexner

have shown that patients with moderate impairment of kidney function succumb to infections that are well borne by others who have a normal power of elimination. After saline infusions, patients may complain of distress over the diaphragm. This is obviated by the application of a two-inch strip of adhesive plaster around the base of the chest. This pain is attributed to an increase in the functional activity of the absorbing areas of the diaphragm; in no instance could it be attributed to peritonitis or pleurisy.—John G. Clarke, in *Univ. of Penn. Med. Bulletin*.

SUPPURATING WOUNDS.

The use of compresses of sodium bicarbonate in the treatment of suppurating wounds is again brought forward by *New York Medical Journal*, August 31. It is claimed that (especially in burns) these compresses rapidly arrest suppuration and promote cicatrization even in cases rebellious to all other treatment. Moreover, the dressing gives excellent results in wounds which heal rapidly without suppuration, by causing the resulting scar to be almost inappreciable. In abscesses the results are equally satisfactory. Compresses may be applied as moist dressings, either renewed every day, or by moistening in situ twice or thrice daily, or again by placing between the compress and the outer covering a compress covered with boric vaseline to prevent evaporation; in this last case, the dressing may be left in place for two days. The principal advantages of this dressing are its absolute innocuousness and its analgesic and antiseptic action, which render it invaluable in practice with children.—*American Journal of Surgery and Gynaecology*.

STIFFENED JOINTS.

In two cases of stiffened joints where the inability to move the limb has appeared to arise from rigidity of the tendons and muscular sheaths, I have injected, subcutaneously, olive oil into the structures, and with some success. I find that a fluid drachm of the oil can be injected around the knee-joint without causing any after inflammation or discomfort. In one instance, where the elbow was operated on in this way, the young woman obtained, for the first time, some degree of movement after six months' entire fixation from rigidity.—Ward, in the *Asclepiad*.

(Sweet almond oil is preferable to olive oil, as the latter is seldom had in a pure state in this country.—*Ed. Detroit Medical Journal*.)

Therapeutic Notes.

BASHAM'S MIXTURE.

An old, time-tried tonic in urinary affections, particularly in degenerative conditions of the kidneys, is "Basham's Mixture." The virtues of this preparation were extolled in lecture rooms quite half a century ago, and same is said to-day. In its particular field of usefulness it has well stood the test of time. Its composition is:—

R̄ Tr. ferri chlor..... .f. ʒiij
Acid acet. dil..... .f. ʒiiss
Syr. simp..... .f. ʒss
Liq. ammon. acetat., q. s. ad..... .f. ʒiv

M. Sig.:—One dessertspoonful every two hours.—

Clinical Review.

CHILBLAINS.

R̄ Liquoris plumbi subacetatis.
Tinct, opii, of each, 1 ounce.
Aq. dest., q. s. ad 16 ounces.

M. Sig.: Keep applied freely on well-moistened soft cloth.

Dr. J. H. Vadikin recommends for chilblains a stupe consisting of one teaspoonful of acetate of zinc to a bowl of hot water. He has tried it very successfully.—*New York Medical Journal.*

NUTRIENT ENEMATA.

In many instances a nutrient enema composed only of whiskey and peptonized milk will not be retained by the patient. A better combination, and one which will give more satisfactory results, is the following:—

R̄ Beef peptonoids, 2 drachms.

Yelk of egg, No. 1.

• Whiskey, ½ ounce.

Tinct. opii, 5' to 10 minims.

Salt, q. s.

Peptonized milk, q. s. ad 6 ounces.— *Medical Fortnightly*

PRURITUS ANI.

The following gives great service in relieving the troublesome itching:—

R_x Alum. 30 grains.
 Pulv. camphore, 1½ drachms.
 Lanolini, q.s. ad 1 ounce.

M. Sig.:—Apply locally night and morning.—
Journal of the American Medical Association.

HÆMOPTYSIS.

R_x Acidi gallici, 2 drachms.
 Acidi sulph. aromat., 1 drachm.
 Glycerini, 1 ounce.
 Aq. destillatæ, q.s. ad 6 ounces.

M. Sig.:—Teaspoonful at dose; repeat frequently.—
Pepper.

TO PREVENT BED-SORES.

R_x Alumin.,
 Sodii chloridi, of each, ½ ounce.
 Aquæ,
 Alcoholis, of each, 1 pint.

M. Sig.:—Use twice a day locally.—Forbes (*Maryland Medical Journal*).

CALOMEL IN HÆMORRHOIDS.

This drug is not only curative, but also prevents the phlebitis which causes so much pain. For external hæmorrhoids give laxatives, and powder with calomel; for internal hæmorrhoids use calomel suppositories or an ointment of

R_x Calomel, 30 grains.
 Vaseline,
 Lanolin, of each, ½ ounce.

Add belladonna or opium if desired. Wash anus with boric-acid water after each defecation.—*Journal de Médecine de Bordeaux.*

Jottings.

Tincture of iodine locally will abort a sore throat.

Codeine is the only opiate that should be given children.

To remove cerumen apply ether to the meatus with a pipet.

A good topical application in ivy poisoning is chloral hydrate.

In marked chlorosis give clysters twice daily of defibrinated blood.

For angina pectoris give $\frac{1}{2}$ to $\frac{2}{3}$ gtt. of tr. of lobelia every two hours.

Quassin is by all odds one of our best tonics combined with strychnine, it's the best.

For ringworm, wash and apply pyrogallic acid fifteen grains in collodion, one ounce.

When a urinary antiseptic is needed try lithium benzoate. It is eliminated through the kidneys, increases the flow of urine and sedates the urinary tract.

Always be on the lookout for "walking typhoid." If a man comes to you "feeling sick" be sure and take the temperature and inspect the tongue and abdomen.

INFANTILE COLIC.

A towel dipped in boiling water, wrung out rapidly, folded to proper size, and applied to the abdomen with a dry flannel over the hot towel, acts like magic in infantile colic.

ORTHOFORM IN TOOTHACHE.

Hildebrand, in *Therapeutische Monatsschrift*, states that orthoform instantly and completely relieves severe pain due to inflammation of the pulp in decayed teeth. It should be applied in alcoholic solution on absorbent cotton.
—*Journal of the American Medical Association.*

WRITERS' CRAMP.

Several sufferers from writers' cramp are reported to have obtained great relief by becoming enthusiastic golfers. This game requires the use of the upper extremities just to the degree adapted to people who have lived a sedentary life. The movements are necessarily coordinate, and they are combined with proper exercise of the lower extremities, and a large amount of time is passed in the open air.

HOT MILK.

Hot milk is a most nutritious beverage—a real luxury, the value of which but few people know. Many who have abund-

ance of milk never think of using it as a drink—or rather as an eatable—for we should eat milk instead of drinking it, that is, take it in small sips. Why? Because the casein of milk when it comes in contact with the acid of the gastric fluid, coagulates and forms curd, and if swallowed in large quantities at once, a large curd is formed, which the stomach handles with difficulty. The gastric fluid can mingle much more readily with the small curds that result from sipping the milk.

TETRANITROL.

Huchard has used tetranitrol as a vaso-dilator in one hundred and twenty patients, and has found it free from the unpleasant effects of nitroglycerin, headache, throbbing of temporals, etc. He also holds that it does not affect the haemoglobin like other nitrates. It has the great advantage of mild prolonged action. Its action is manifest in from fifteen minutes to three-quarters of an hour, and if continued in from 1 to 2-grain doses, four or five times a day, it keeps the vessels in a state of reduced tension. It is indicated when there is increased arterial tension, as in arteriosclerosis, in coronary angina, in dilatation of the heart from peripheral vascular constriction, in uric-acid dyscrasia, in tabetic crisis and in interstitial nephritis.

LOCOMOTOR ATAXIA.

Dr. S. Leduc, Professor of Medicine in the School of Medicine at Nantes (*Gazette Medicale de Nantes*), basing his practice on the theory that the syphilitic origin of locomotor ataxia is scarcely contested to-day, for a past history of syphilis is found in nearly all ataxics, has injected daily into the muscles of the patient's thigh 2 grammes—about 30 minims—of the following solution:—

R Corrosive sublimate,
Recrystallized sod. chlor., of each, 3 grains.
Aq. dest., 300 minims.

M.—It is said that amelioration was at once manifest. Treatment was continued for periods of three weeks, followed by remissions of fifteen days. Six years from the commencement of the treatment the patient has lost the knee-jerk, and, although some lightning pains persist, he walks well, even at night, and leads a very active life.—*New York Medical Journal*.

" SOUVENIR DE JEUNE AGE."

(A reminiscence of the Nurses Ball of the Graduating Class of 1892,
Montreal General Hospital, held in the Victoria Armoury Hall,
Cathcart Street).

I slept; and as I slept I dreamed—a curious dream to me it seemed,
—(A scene from long-ago redeemed), a spacious hall, where in there
gleamed

Faces bright which fairly beamed with joy and gladness; nor yet deemed
It wrong, that from their labours weaned, with light fantastic toe careened
With ardent youth; or on them leaned

with tender glances,

While sparkling eye and rosy cheek, and heaving bosom all bespeak
The pleasure they enjoy who seek the sensuous waltz's measure sweet
With a congenial partner—neat, yet manly; one whose feet
Scarce touch the floor, they are so fleet; one who is told, and withall
meek,

A strong protector of the weak—

Such fair maid fancies,

.....

But while I stood and pondered there, on scene so brilliant, face so fair,
On flashing teeth and wondrous hair, I suddenly became aware
That I was not alone, for there, beside me where I stood, the air
Was redolent with perfume rare.

Faint yet so sweet

A lovely voice, surpassing kind (like sighings of the summer wind,
Such voices may true lovers find, as walking with their arms entwined
Their oft repeated vows they bind—) "Tell me" it said "what do you find
"In me so strange you seem inclined to be afraid, are you so blind?
"You cannot see the mask behind?" I gave my card—, as I opened
In the blank space was "MEMORY" signed.

faithful but fleet!

Then she told in accents clear
How it came that I was here.

.....

"This is the room in the Armoury Hall, where the nurses (bless 'em one
and all)

"From the General Hospital, Montreal, thought they'd like to give a ball.
"(For eight of them graduate this fall). So what did they do but a
meeting call,

"At which those nurses short and tall, decided they *should* have a ball

"But alack! alas!! the question rose "What would Miss L. say d'you
suppose?"

"When of our little plot she knows?" "She seldom opposition shews,

"Or counter to our wishes goes" says one, whose face is like a rose

With smiles alike for friends and foes—"I'll tell you, girls, what I propose
"Let's all draw lots to see who goes to tell that Miss (of portly pose)."

Then there was excitement great, among that class of nurses eight

To see on whose unlucky pate should fall the heavy hand of fate—

The papers torn in pieces straight, each took one with a heart elate

Hoping that *she* at anyrate, wouldn't have to face that maid sedate,

Fearing that what she'd to relate, might make her just a bit irate.

The ballot o'er, she with brown eyes, declares, amid profound sighs
 "That she alas! has got the prize," so straightway down the passage hies
 In the direction where there lies the room which Miss L. occupies—
 The Matron listens with surprise, while nurse lays forth in tempting guise
 (In words which we can but surmise) the object of her enterprise.
 The audience o'er, her sanction got, in that same meeting were a lot
 Who (and, I think, quite rightly) thought, a private house too *small* and
 hot

To have a dance in,—that they ought to have some place more fitting
 sought,

Says one (whose name I have forgot) "The Armoury Hall is just the spot."
 Th' idea was new, and so it caught, the fancy of the girls—they wrought
 And baked and worked and ice-cream bought, called flags and flowers to
 their support,

Until they very air was frought

with an atmosphere of myst'ry.

At length th' eventful night came round; their guests made welcome to
 the sound

Of sweet enchanting music (found where'er there's beauty, I'll be bound
 And dainty feet to trip the ground). Their words of welcome almost
 drowned

In the general buz of talk around.

Repeated now in History.

.....

But while I watched this fairy dell, methought I heard a tinkling bell
 Which somehow seemed to break the spell—the voice beside me cried
 "farewell"

And vanished—where I cannot tell, while the tinkle-TINKLE seemed to
 swell,

Till it seemed to sound the very knell of earthly things, and with a yell:
 I woke; and thought I was in well,

A place whence folk can't hurry!

—Envoi—

"'Twas nothing but an aching tooth which some poor fellow had, forsooth
 and wanted me to quarry!

But it brought me back from scenes of youth:—I'm telling you the honest
 truth

Altho' the language *be* uncouth.

Hang it! I was sorry!!

—R. W.,

'93.

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Editorial.

A NEW GENERAL ANAESTHETIC.

The *Dublin Medical Press*, of December 11, 1901, says:
"There are a number of minor operations in surgery
that occupy from five to twenty minutes, a period of time
too long for completion under the anaesthesia of nitrous
oxide gas. To meet this difficulty the admixture of
oxygen and nitrous oxide has been tried, but the com-
pound has not met with general favour, and its use has
never been very general. Cocainisation of the cord in the
hands of some French surgeons has given good results,
but in quite a number of cases the results have been dis-
astrous. Schleich's infiltration method has gradually
lost ground, if, indeed, it could ever be said to have been
in favour in this country. For a time the freezing
methods by evaporation of ether and chloride of ethyl
were tried, but at best, they were only suited for a very
limited group of cases. It is, therefore, with pleasure
that we note the good results that are being obtained by
the use of pure chloride of ethyl as a general anaesthetic.
At the recent Congress of Surgery, M. Malherbe, who has
been using the anaesthetic since 1898, when he first used
it in the clinic of Professor von Hacker, speaks highly of

its properties as an anaesthetic and its comparative freedom from toxic or other undesirable after effects. We concede that the chorus of praise which ushers in new remedies, should be largely discounted without there are good grounds for anticipating that the drug will prove a satisfactory and safe general anaesthetic for minor operations generally. We will do no more than draw attention to the fact that it belongs to the ethyl group, and that its percentage of chlorine is small. All the volatile ethyl compounds have anaesthetic properties, and, as a rule, are not lethal; indeed, the oxide of the radical principally produces its injurious effects by producing inflammation of one or more of the tissues than by direct action as an anaesthetic. One of the great troubles of the use of the oxide is its irritating suffocative effect on the respiratory mucous membrane which the antecedent use of nitrous oxide or chloroform does not wholly overcome. The chloride of ethyl, if we are to judge from the clinical reports, has no irritant action on the respiratory tract, and it has the further advantage of acting very quickly, and is not followed by the headache, vomiting, bronchial irritation, and renal pains which so often follow etherization. The patient quickly recovers from the anaesthetic effects of the vapour, and the return to consciousness is complete. M. Malherbe (*Le Progres Medical*) employed the anaesthetic 170 times without one unpleasant result, and in each case, found the effects of the chemical were uniform. We cannot, however, judge from the experience of one surgeon in so small a number of cases, but we think a good case is made out for its tentative use.

SOME REMINISCENCES OF SYME.

Dr. Donald Maclean, Professor of Surgery at Ann Arbor University, Michigan, and an Ex-President of the American Medical Association, has published some interesting personal reminiscences of Syme, the celebrated Scotch surgeon, whose pupil he was at Edinburgh, forty years ago. Although no man could possibly be more abstemious in his habits than Syme, all through his life,

nevertheless he seems to have had a distinct feeling of dislike for teetotallers. Professor Maclean recalls how a boy of not more than twelve years of age presented himself, suffering from a peculiarly loathsome disease. Syme, with an expression of disgust on his face, said to the youthful sinner: "Are you a teetotaller?" and when the boy replied "Oh yes, sir," Syme quietly said, with an expressive twinkle in his eye: "I thought so." Coming once upon Dr. Maclean while sitting on the doorstep of the Royal Infirmary playing with a skye terrier pup which had been given him by a grateful patient, Syme said, with an air of mock severity, "Permit me to inform you that there are just three steps to ruin for a young man: first, a dog, second, a pipe, and third, a woman." Dr. Maclean recalls one of the boldest operations which even Syme ever performed. A shipwrecked sailor, in making a desperate leap for his life, ruptured the common iliac artery close to its bifurcation, with the result that an enormous aneurysm developed. Syme determined to operate, and asked Professor (now Lord) Lister to be present. The latter brought with him an instrument, now known as Lister's aortic compressor, which he had devised expressly for the case. Syme, who was naturally of a conservative disposition, was not particularly impressed by the instrument when shown to him. He proceeded to operate, and when he laid open the aneurysm, terrific hæmorrhage took place, which, but for Lister's instrument, would, undoubtedly, have proved fatal. As it was, the aorta was controlled, and Syme was able to tie the common internal, and external iliac arteries, and to save the patient's life. Syme was one of the pioneers in the operative treatment of cancer of the tongue by entire removal of the organ. His earliest cases were unsuccessful, and, consequently, he was somewhat severely criticized in certain quarters. Undeterred by this, however, at the meeting of the British Medical Association at Edinburgh in 1858, he performed the operation once more before a large number of distinguished surgeons from all parts of the kingdom. After the patient had been removed to his bed, the audience loudly applauded the operator. Dr.

Maclean continues: "The professor calmly turned round as he was drying his hands and pointed to a notice on the wall requesting order and silence in the amphitheatre. This facetious act elicited a fresh burst of applause. He then stepped forward with the evident intention of saying something, and instantaneously every sound ceased, every breath was held, every ear was eager to catch the slightest sound which dropped from his lips. Rumour has it that the following was what they heard: "Gentlemen, permit me to assure you that I have reached an age and a position in the profession at which I care neither for censure nor commendation," and he bowed politely and walked out of the amphitheatre. The last time Dr. Maclean saw Syme was in 1872, shortly after the great surgeon had had an attack of apoplexy. When he had shaken hands for the last time, Syme seized the collar of his coat, and with a quick, nervous movement, turned him rapidly round so that he could look into his face and said, "Be sure and keep your eye on Lister and his antiseptic investigations. I feel sure that there is something in them. And remember, sir, look forwards, do not look backwards" Prophetic words! But even Syme could hardly have foreseen how much there was in these investigations of his distinguished son-in-law.

THE STRANGE ADVENTURES OF AN ANATOMIST'S HEAD.

Xavier Bichat passed a considerable part of his short life in the dead-house, but his own mortal remains appear to have had a more singular fate than usually befalls the fragments of humanity in which he sought so eagerly to discover the secret of life. Writing recently in the *Temps*, M. G. Clarétie says it is well known that when Cuvier was put into his coffin an iron cage was placed over his head so that it might not be stolen as Bichat's had been. A writer in the *Chronique Médicale*, commenting on this statement, says that in 1808 there came in a curious fashion of doing honour to "masters of medicine" by keeping their heads

in the condition of anatomical preparations for 40 years. Bichat was buried in the St. Catherine Cemetery, in a small corner bought by one of his colleagues at the Hôtel Dieu, and might never have been found if the pious care of friends had not from time to time renewed the marks by which the grave was identified. The cemetery having been closed, Bichat's remains were removed to Père Lachaise. On November 16, 1845, the body was exhumed under the direction of Dr. Denonvilliers, and in the presence of four members of Bichat's family, one of whom was Dr. Adet de Roseville, assistant physician of Saint Lazare, husband of Bichat's niece. The report of the exhumation states that, under a gravestone bearing the inscription "À Xavier Bichat, par les Membres de la Société d'Instruction Médicale," there was discovered, at a depth of 1 m. 70 cm., in a soil of remarkable dryness, an excellently-preserved skeleton. The cervical vertebræ were perfect, but the head was missing. Further digging failed to bring the head to light. Professor Roux, who was present, came forward and stated that the head of Bichat had "come into his hands" three years after the death of the great anatomist. He described the head, calling attention to the following points: (1) The existence of a fracture of the occipital bone, which he himself had made at the *post-mortem* examination; (2) the obliteration of the alveoli of the first upper molar of the left side and of the corresponding one on the right, which Bichat had had extracted towards the end of his life, after having suffered much from those teeth, as he says himself in his article on the teeth in his *Anatomie Générale*; (3) the perfect correspondence of the articular surfaces of the atlas found in the grave with those on the skull. M. Malgaigne had previously arranged in an oak coffin all the bones as they were taken up, and M. Roux completed them by restoring with his own hands the skull which had been so long separated from the skeleton. It may be mentioned that the ceremony of the translation of the relics to Père Lachaise was attended by some 4,000 members of the medical profession.

PRESIDENT McKINLEY'S CASE.

The Cleveland *Medical Journal* makes the following remarks in a recent issue. We commend them to our readers, especially those resident in cities, because a large amount of truth is condensed into a few lines :

"Under present customs the surgeon expects the general physician to call him in consultation in every surgical case; the surgeon, when first consulted, usually forgets to call a general physician. In the first case the surgeon assumes that the internist can know nothing of surgery, while in the second he credits himself with a full knowledge of internal medicine in addition to his surgical skill. The surgeon's experience does not lead him to the acquirement of facility in the finer methods of physical diagnosis, and in what appears to him a purely operative case he not infrequently overlooks slight morbid changes in the heart, blood vessels, lungs, kidneys or other organs. The time has now come when the surgeon, in asking the consulting support of the general physician on the ground of his especial surgical training and skill, must no longer assume to be a specialist in internal medicine. In addition to being distinctly unfair, this attitude is illogical in the extreme, and is at times productive of results much less happy than might be obtained by the hearty co-operation of both parties.....The medical profession would not now feel under the necessity to condone the want of care in prognosis that was shown by some at least of the President's surgeons. The thin-walled heart, accompanied by a disproportionately rapid and irregular pulse, could not have failed very early in the case to have unfavourably impressed the physician skilled in estimating the reserve power of a cardiac muscle."

A VERY TIMELY TREATISE ON SMALL-POX.

A very timely treatise on small-pox, to sell at \$3, is announced for publication early in April, by J. B. Lippincott Company. It is written by Dr. George Henry Fox,

Professor of Dermatology in the College of Physicians, and Surgeons, New York City, with the collaboration of Drs. S. Dana Hubbard, Sigmund Pollitzer and John H. Huddleston, all of whom are officials of the Health Department of New York City, and have had unusual opportunities for the study and treatment of this disease during the present epidemic.

The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases, published by the same house. A strong feature of the work will be its illustrations, reproduced from recent photographs, the major portion of which will be so coloured as to give a very faithful representation of typical cases of variola in the successive stages of the disease, also unusual phases of variola, vaccinia, varicella, and diseases with which smallpox is liable to be confounded. These illustrations number thirty-seven, and will be grouped into ten coloured plates, 9 1-2 by 10 1-4 inches, and six black and white photographic plates.

The names of Dr. Fox and his associates assure the excellence of the work, in which will be described the symptoms, course of the disease, characteristic points of diagnosis and most approved methods of treatment.

AMERICAN PRECOCITY IN FEMALE PUBERTY.

Dr. Geo. J. Englemann, of Boston, in a report at the recent meeting of the American Gynaecological Association in Chicago, gave the results of over 10,000 observations as to the time of first menstruation of American-born women. As a result of his investigation, he concludes that the American-born are more precocious than the women of other countries in the same zone; 14 is the age of puberty in the United States and Canada; 15.5 in the temperate zone of Europe. But racial characteristics fade rapidly away in America, the age of puberty in Germany being 15.5 to 16, in Ireland, 15.3, and for the girl born in America, of German or Irish parentage, 14.5. The Canadian French alone of all races are more precocious than the American of the same class when born

in this country, the mean age being found to be 13.7 whereas the age is between 14 and 15 in the native land. Mentality, surroundings, education and nerve stimulation stand out prominently in this country as the factors which determine our peculiar precocity.

THE EFFICACY OF VACCINATION.

According to Dr. J. E. Laberge, of the Contagious Diseases Hospital, Montreal, the efficacy of vaccination as a preventive of smallpox, has been abundantly proven within the last year in this city. Since May last there have been in the City of Montreal Contagious Diseases Hospital 240 cases of smallpox, and in no instance had a single patient been vaccinated. In addition to these, there was a staff of eighteen persons, physicians and nurses, who, for these months have been in daily and hourly contact with these smallpox patients, but not one of them has ever contracted the disease. The order issued to municipalities throughout the province of Quebec has been fairly well obeyed, and three hundred and forty-seven municipalities have so far adopted the prescribed by-laws with regard to general vaccination with its accompanying fines for non-fulfillment of same.

THE LATE DR. W. S. MUIR, OF TRURO, N.S.

Many of our readers will learn with deep regret of the death of the above-named medical man. He died last month from appendicitis, after two or three days' illness, an operation having been performed. Dr. Muir was a constant attendant at the meetings of the Canadian Medical Association, and ever evinced great interest in its welfare. He was most genial in his character, and was universally beloved by all who knew him. He will be greatly missed.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

This Society now occupies elegant quarters over the West End branch of the Bank of Montreal, St. Catherine street. The lecture room will seat a hundred and fifty.

There is a well supplied reading room, the nucleus of a good library and a writing room. These are practically open day and evening, to the members. The officers for the present year are: President, Dr. George E. Armstrong; Vice-President, Dr. H. S. Birkett; Secretary, Dr. Alfred Bazin; Treasurer, Dr. J. M. Jack; Trustees, Drs. Perrigo, Dr. G. A. Brown and Dr. F. J. Shepherd.

YOU'LL HAVE TO SHOW US.

A recent number of the *Medical Fortnightly*, says:—"Japanese dentists, according to a contemporary, perform their operations in tooth-drawing with the thumb and forefinger of one hand. The skill necessary to do this is acquired only after long practice, but when once it is obtained the operator is able to extract half a dozen teeth in about thirty seconds without once removing his fingers from the patient's mouth. A dentist in this country is mentioned in the papers as using this method with success, having learned it from a Japanese.

THE COW PEA.

The "Cow Pea" is the title of the latest publication issued by the Experiment Farm of the North Carolina State Horticultural Society at Southern Pines, N.C. This book neatly bound and illustrated, in plain and concise manner, discusses the value and uses of this important crop, the "Cow Pea." Every reader can get a copy free by writing to the Superintendent of Experiment Farm, Southern Pines, N. C.

CANADIAN MEDICAL ASSOCIATION.

The annual meeting of the Canadian Medical Association will be held in Montreal on the 16th, 17th and 18th days of September, 1902. The President is Dr. Francis J. Shepherd, 152 Mansfield St., Montreal, the Local Secretary, Dr. C. F. Martin, Durocher St., Montreal, and the General

Secretary, Dr. George Elliott, 129 John St., Toronto. Dr. William Osler, Professor of Medicine in Johns Hopkins University, will deliver the Address in Medicine and Dr. John Stewart, Halifax, Nova Scotia, the Address in Surgery. Arrangements are already well in hand for a very large meeting.

Jonathan Hutchinson, F.R.S., General Secretary of the New Sydenham Society, has requested Messrs. P. Blakiston's, Son & Co., of Philadelphia, the American agents of the Society, to announce the publication of "An Atlas of Clinical Medicine, Surgery and Pathology," selected and arranged with the design to afford, in as complete a manner as possible, aids to diagnosis in all departments of practice. It is proposed to complete the work in five years, in fasciculi form, eight to ten plates issued every three months in connection with the regular publications of the Society. The New Sydenham Society was established in 1858, with the object of publishing essays, monographs and translations of works which could not be otherwise issued. The list of publications numbers upwards of 170 volumes of the greatest scientific value. An effort is now being made to increase the membership in order to extend its work.

Personals.

Dr. Benoit has been appointed physician to the Montreal Goal.

Dr. J. Alex. Hutchison, of Montreal, has been appointed surgeon-in-chief to the Central Vermont Railroad.

Dr. J. W. Geoffrien, of Chicago, a graduate of Laval University, has left that city to establish himself in Montreal.

Professor J. S. Donald, of the Medical Faculty of Bishop's College, has been appointed public analyst in place of the late J. Baker Edwards.

Dr. A. G. McDougall, late house surgeon to the Toronto General Hospital, has been appointed medical attaché to the regiment in charge of the Boer prisoners at Hamilton, Jamaica.

Dr. Shirres, of Montreal, has been appointed Professor of Nervous Diseases in the University of Vermont, Burlington. Dr. Shirres came to Canada with Lord Aberdeen as physician to the Vice Regal family.

Dr. H. L. Reddy has resigned his position as one of the attending physicians to the Western General Hospital, with a view of devoting more time to the Women's Hospital, of which he is chief physician and accoucheur. Dr. W. Grant Stewart was elected to replace Dr. Reddy on the staff of the Western Hospital.

Dr. W. H. Drummond, M.D., Bishop's, 1884, Professor of Medical Jurisprudence in the Faculty of Medicine, Bishop's University, author of "The Habitant," "Johnny Courteau" and other poems, is to have the degree of LL.D. conferred on him by Toronto University, in June. Dr. Drummond was, on the 18th of March, the recipient of a public dinner from the Canadian Society of New York, at which over two hundred guests sat down, among them being some of the most distinguished men of the United States. Dr. Wolford Nelson, of New York, and Dr. Tetreault, of Orange, N. J., both graduates of Bishop's College, attended to do honour to their fellow graduate.

Book Reviews.

International Clinics.—A quarterly of clinical lectures and especially prepared articles on all branches of Medicine and Surgery and other topics of interest to students and practitioners. By leading members of the Medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U.S.A., with the collaboration of John B. Murphy, M.D., Chicago; Alex. D. Blackader, M.D., Montreal; H. C. Wood, M.D., Philadelphia; T. M. Rotch, M.D., Boston; E. Landort, M.D., Paris; Thos. G. Marton, M.D., of Philadelphia, and Chas. H. Reed, M.D.; J. B. Ballantyne, M.D., of Edinburgh and John Harold, M.D., of London; with regular correspondents in Montreal, London, Paris, Leipsic and Vienna; volume IV.; eleventh series. J. P. Lippincott & Co., Philadelphia, 1902. Canadian agent, Charles Roberts, 1524 Ontario street, Montreal.

This the last volume of the eleventh series is not behind its predecessors in its quota of interesting and instructive articles. There are thirty one papers under the headings of Therapeutics, Medicine, Surgery, Neurology, Pædiatrics and Dermatology, with a special article on the Keeping of Case Records in Private Practice, by Frederick Packard, M.D., Judson Deland, M.D., John H. Musser, M.D., J. P. Crozier Griffith, M.D., J. K. Mitchell, M.D., Alfred Stengel, M.D.

The first of a series of papers is given by Dr. Horatio C. Wood, jun., entitled a Description of the Methods of Investigating the Action of Drugs. He points out the fact that the older practitioners had not the advantage of seeing at college the methods of investigating drugs now to be observed in the modern pathological laboratory, and, as clinical methods do not give reliable results in ascertaining the true value of a drug, a description of recent methods will enable readers to interpret the results from the pathological laboratory. The present article considers the action of drugs on the circulation. The methods are described in detail and illustrated by lithographs of the various forms of apparatus used.

Prof. Albert Mathieu, of Paris, gives a special article on the Treatment of Muco Membranous Colitis, which is replete with practical suggestions. The relation of the local irritation and the general neurotic condition is pointed out and exhaustive direction given in regard to diet and local and general medication. The application of massage, hydrotherapy and moral hygiene in this affection is fully described.

Sir Dyce Duckworth, M.D., LL.D., contributes an article on Clinical Observation on Certain Diathetic Conditions. His thirty years of experience has enabled him to sift from the old doctrines of the diatheses, facts which are of great importance in understanding two groups of pathological conditions—the strumous diathesis and the arthritic diathesis. He proves conclusively the existence of these two tendencies, the liabilities associated with their presence, their antagonism to each other, and the important bearing of a recognition of this state on the diagnosis, prognosis and treatment of these affections, and pays high tribute to the skill and acumen of our predecessors in the art and science of medicine who accomplished so much without the means of investigation which we now possess.

One of the most interesting articles in this number is that on Prognosis in Chronic Valvular Disease of the Heart, by J. Mitchell Bruce, M.A., M.D., LL.D., F.R.C.P., London.

Prognosis should, he stated, not be empirical, but be based on the practical application of scientifically determined facts. The facts are those connected with the etiology, pathological anatomy, clinical character and course of the affection.

An old rheumatic lesion is a scar, an affair of the past and rarely progressive, and a favourable prognosis can be made; while in syphilitic or atheromatous changes we must forecast less favourably.

The unfavourable local lesions, such as aortic incompetence, are so, because they are so often degenerative or specific in origin. Then the prognosis in any stated case of valvular diseases, he points out, depends much on the environments and conditions of life in each case, and the forecast must carry with it suggestions of measures for prevention, the avoidance of fresh attacks of rheumatism and over exercise in youth. The work engaged in by the adult, the abuse of alcohol, tobacco, syphilis. The child-bearing period in the female and in advanced life the influence of the various forms of degeneration, some of which are amenable to treatment; all have a distinct bearing on the prognosis and must be carefully estimated in forming our conclusions.

Among other interesting papers are: Winged Insects and their Larvæ as Parasites of Men, by James J. Walsh, M.D., Ph.D.; Types of Hemiplegia, by G. L. Walton, M.D.; Moveable Kidney, by Frank Lydston, M.D.; The Operative Relief of some Forms of Prostatic Hypertrophy, by Charles H. Chetwood, M.D.; Clinical Lectures, by Nicholas Senn, M.D., Ph.D., LL.D., and John B. Deaver, M.D.

J. B. McC.

PUBLISHERS DEPARTMENT.

SANMETTO IN GENITO-URINARY TROUBLES AND IN DISEASES OF MUCOUS MEMBRANES OF A CHRONIC CHARACTER.

I do not generally endorse proprietary medicines, but Sanmetto is such an elegant combination that I must make an exception in its favour. I have used several bottles of it in my practice with the most gratifying and surprising results. I used it in a case of inflammation of neck of bladder. Have also used it in several other cases and will say that I have never used any preparation which has given me such satisfactory results in genito urinary diseases as does Sanmetto. I am afraid that the druggist, in one case, substituted the elixir of saw palmetto, which they have tried to have me use instead of Sanmetto, as it did not taste as it should, but I have tried so many preparations of saw palmetto with no beneficial results that I want the genuine Sanmetto or none.

Racine, Wis.

H. G. PECK, M. D.

SANMETTO IN CYSTITIS, HYPERTROPHY OF THE PROSTATE AND IN PRE-SENILITY.

I have prescribed Sanmetto in my practice for a period of seven years with the happiest results to my patients and great satisfaction to myself. In cystitis, true hypertrophy of the prostate, and where the complex generative system has lost its tone, vigour, and vivacity, it is the remedy par excellence. Many imitations are on the market, but the Od. Chem. Co. of New York makes the only Sanmetto.

Lancaster, Ohio.

J. M. STUKEY, M. D.

CANADA MEDICAL RECORD

MAY, 1902.

Original Communications.

SOME MEDICAL FALLACIES.

Read before the Young Men's Christian Association of Green Bay, Wisconsin, U. S.,
in March, 1902, by

W. E. FAIRFIELD, C.M., M.D.

The Y.M.C.A. is a semi-religious body formed for the double purpose of receiving good itself and of imparting it to others. It belongs to the broader Christianity of the present day, in that it is non-sectarian. It might be likened to the farmer in the religious field, who believes in diversified agriculture as opposed to the one who is a specialist in some particular line. It caters to man's spiritual welfare, while at the same time it is not neglectful of his material comforts and wants.

In what I say this evening, I shall pay particular attention to the latter phase of its vocation, and at the same time shall claim the prerogative of him who caters to the former, in that I ask your indulgence so far as to be allowed to wander from the subject of my discourse, imitating, in so doing, many of the popular divines, as you will bear witness.

To deliver a popular address, it is necessary that the speaker should be satisfied with his effort. He should feel that he has handled his subject in a masterly manner, and that he has correspondingly impressed his hearers. I doubt if Webster could have delivered his address with such profound effect, had he not felt that he was the master of Hayne, not only on the question at issue, but also in his own personality. Knowing his subject was no more essential than knowing his antagonist and his audience.

In the present* instance, a technical knowledge of medicine is not an advantage in the strictest sense, for the speaker must be able to so handle his subject as to make it intelligible to an audience, which, however intellectual, is nevertheless not in possession of a technical knowledge of medicine.

I am, therefore, reduced to the extremity of avoiding many things which would, under some circumstances, prove not uninteresting, and to confine myself to homely and common things, to things of which both you and I have some knowledge, but as to which we may have some honest differences of opinion.

Medicine is not as yet an exact science. The most eminent medical man cannot, under any circumstances, say positively that a certain drug, or a certain combination of drugs will cure a certain condition. True, it is rapidly approaching this point, and the progress made in the past fifty years bids fair to show us the dawn of this much-desired era.

The exact nature of disease or diseased tissues is being studied as never before. The scientific physician is no longer satisfied to know that a certain drug has a beneficial effect in a certain disease, but he inquires what is this disease? What structures are involved? How are these structures affected? Why does this drug become beneficial? and above all, how can this disease be prevented? The empiric has no place in the practice of medicine to-day. It is not enough to know that a certain thing is good, but one must know why it is good. We are thus rapidly approaching an age when we will prescribe a certain drug for a specific disease and prescribe it intelligently.

For years quinine has been used as a remedy for malaria. It was and is a specific in that it inhibits the multiplication in the system of the specific malarial germ. The germ itself is the discovery of recent months, and it has been conclusively proven that it gains access to the system, not through the air or water or food, but through the bites of infected mosquitoes. The prevention of malaria, therefore, resolves itself into the annihilation of the mosquito. Until this is accomplished, we continue to give quinine, but we give it with an understanding of its action and a comprehension of its limitations.

It is but a few years since the sore throat, which accompanies scarlet fever and that of diphtheria, were believed to be identical. The same remedies were applied to both. Now we have studied and know the bacillus of diphtheria, and that knowledge has already led to the discovery of an antitoxin, which, injected into the system, counteracts the poisonous effects of the bacillus itself, thereby saving thousands of lives every year.

These are but illustrations of the fact that the scientific practitioner looks for cause, and not only wants to remove it, but also to know the exact nature of the agent

which he uses to this end. The physician can no longer attend a meeting of scientific men and say that a certain drug will cure a certain condition; unless he can show the cause of the disease and the *modus operandi* of his cure, he will immediately subject himself to derision.

Man has, for so long, considered himself lord of creation, and the bright, particular star of perfection, that it is hard to bring him to a realization of the fact that he may be overestimating himself. He likes to be considered master of himself and of others, and his arguments are quite convincing if one but looks on the surface. The scientific man must look upon him, however, as a more or less beautiful machine, composed of many parts, and each part in turn composed of an elementary form of substance which we call a cell.

I would have you examine with me this elementary body to gain an understanding of many of the phenomena connected with the ever-present processes of birth, growth, development, decline and death. This cell is, to all intents and purposes, a living unit. Its size is so minute that high powers of the microscope are necessary to disclose it, but when once it is brought to view, we have revealed all the attributes of that most lordly animal, man himself, excepting a love for clothes and whiskey. Different types of structure have different types of cells; those of nerve tissues are not like those of muscular tissue, etc., but they are, notwithstanding, all constructed on the same plan. A little atom bounded by a wall like that of an egg, and containing a body or cell contents, with a living center or nucleus. To prove the fact that these cells are living and independent structures, it is only necessary to say that they possess the power to defend themselves against enemies and to propagate themselves. Resistance to disease and cure of diseased tissues is thus accounted for. This is no theoretical statement, but one that can be clearly and incontrovertibly demonstrated.

In the blood we have two sets of cells, the white and red corpuscles. The principal office of the white is to destroy poisonous germs. Now, in blood poisoning, nature immediately comes to the rescue of the individual by increasing its army of white corpuscles. Disease germs are surrounded and destroyed, surrounded by individual corpuscles, which absorb and destroy them, or being unequal to the conquest, throw themselves over the parapet, holding the invader in their grasp, and are thrown off by the system in the form of pus. A wonderful and interesting thing this process of increasing the army of defence at will; and no more wonderful than the

fact that when once the enemy is repelled, the army is again reduced to a peace footing. No imperialism in this living republic, no boasting after the battle, no stealing of reputations. No *courti* martials or appeals for vindication in an army where every duty is so well performed. When the strength of the force of disease is less than that of the defenders, we get well, when the opposite obtains, we die. The great question of cure rests with the cells alone.

Then, what is the office of the physician? If the power to repel disease is inherent in the cells, why take medicine, why call upon the physician? Let me try to explain.

In the first place, these germs find their way into the system from the outside; through a wound; through the digestive tract, through the respiratory surfaces, etc. Once in the system, he can do little to combat them, but he can do much to prevent further absorptions. The intestinal antiseptic is no less sure in preventing absorption of the typhoid bacillus than is the knife in preventing the absorption of pus from an abscess cavity. When once the source of the invasion is known, much can be done to prevent inroads and to sustain the powers of life, looking to the cells themselves to make the great fight. The great physician is simply the man who best understands these little cells, and understanding them, conserves their powers.

A knowledge of the cellular structure and of the germ theory of disease makes scientific reasoning possible in medicine. True, we have men who do not believe in the germ origin of disease; we also have men who believe in witches, and signs and wonders. These we will always have with us. Reason finds no place in the space which should be occupied by brains in some cases. The good Lord put such people among us, methinks, to make us thankful for the faculty of reason. A little knowledge is a dangerous thing with such people, as it is with all people. They no sooner see a means which is effective in one case, than they make it applicable to all cases. A narrow man is to be avoided on general principles. He is the one you will invariably find clinging to one of the isms of medicine. He will believe in massage as a cure for everything; or in the waters of some particular spring, or in some patent medicine, or some diabolical mixture supposed to have been originated by an Indian medicine man, or in some form of bath; or in suggestion or hypnotism, or mental therapeutics or Christian Science. He will agree with the homoeopath that the part of a thing is greater than the whole; that a drop of alcohol put into a

barrel of water and well shaken is more powerful than a whole barrel of alcohol; that like cures like, and so he would cut off the second leg to remove the inconvenience occasioned by the loss of the first. He will carry a potato in his pocket to cure rheumatism, and blame God Almighty for the loss of his child from smallpox, when he neglected vaccination.

Be careful of the man who is too narrow to accept the good from whatever source it may come; whether he be allopath, homoeopath, eclectic, Indian or just common fool.

There is no such thing as hydropathic, allopathic, homoeopathic and eclectic schools to the scientific man. He acknowledges no man's right to adopt a remedy and say "It is mine; it belongs to my school." He is eager and ready to accept it as soon as its worth is proven, and it is to such a man that you and I must look for advancements along the line of scientific medicine. A man may accidentally discover a gold mine, but it takes application and knowledge and reasoning and labour to perfect the incandescent light, or harness the powers of Niagara. The unreasoning quack or empiric may light upon a remedy of merit, but it takes work and thought to evolve a rational treatment for disease.

I am always amused when I am shown a prescription containing a multiplicity of remedies. When I see ten to twenty drugs in a prescription, I know that it was written by a man whose knowledge of the case under observation was limited. His is the shot gun theory, namely, in many missiles one of them may hit the mark. When I see thirty remedies in a mixture I can discover at least twenty-five reasons for not giving it.

I want to let you into another professional secret. Those of this audience who, before they reformed, attended the theatre, know that when a doctor has a part in a play, he is invariably accused of giving bread pills. If I should ever fail to hear this superannuated joke, I would feel lonesome and robbed of my rights. Now, physicians call this form of treatment the administration of a "placebo." It is Christian Science treatment under another name, and is equally honest and efficacious. If a man can be cured by believing that there is no such thing as pain, he can be cured by believing that a bread pill is the remedy he needs, and he will have the added advantage of not appearing inconsistent when he puts his thumb in his mouth after he hits it with the hammer.

Now, the "placebo" is going out of fashion—in fact I may say that it is entirely so. Instead of it we have re-

course to suggestive therapeutics, which, in other and plainer language, means simply that the illness being imaginary and the patient not possessed of sufficient reasoning power to see it, he is simply told that he will be better to-morrow and to-morrow, and the impression thus made, removes the imaginary difficulty. Some have elaborated this suggestion so nicely that they are able to impart its blessings through the medium of scraps of paper and cheap handkerchiefs sent through the mail. I think this could be further elaborated by saying into a phonograph, "Please put \$5.00 in the slot. Now pull down the lever. There! Now listen carefully and attentively. You are a wonderful creature, and a combination of circumstances have conspired to keep you from occupying that position your merit deserves. You are not appreciated by your companions, and I only can read your soul. You will be better to-morrow, better to-morrow, when you must come again, and be sure to bring a new \$5.00 gold piece; the one you brought to-day is plugged." A suggestive sanitarium with phonographic annex should be a squealing success.

Just a word in leaving the subject of "isms"—because a certain treatment will cure a cold, don't conclude also that it is good for burns. While it reduces fever, it may not necessarily be good for chills. While it may cure bald heads, it may not be applicable to the removal of superfluous hair.

The matter of diet is one that is fraught with great importance in its relation to health. Here, I want to warn you against fads. If you are well, you require a well regulated, generous diet, both animal and vegetable. If your digestion is at fault, correct the fault so that you can enjoy a mixed diet. The narrow individual of whom I spoke sometime ago, will cling to one thing, usually to a so-called health food, or at least to a vegetable diet with a glass of hot water as a dissipation. There is need in this country of the establishment of a "Keely Cure" for the hot water habit. Because some individual in a community was benefited by taking a glass of hot water before breakfast, it follows that the whole community must use it. The glass of hot water before breakfast is followed by a glass before lunch and dinner. Then a glass before bedtime, and one of my patients went so far as to set an alarm clock to waken him at regular intervals, so that he might partake of this form of hydro-therapy, arguing the while, that because there were hot springs in Arkansas, the Lord had intended that water should be taken hot. I can always tell the hot water fiend. He reminds me so much of a boiled lobster.

In leaving this subject I want to say a few words on the use of drugs. Let me warn you against taking a medicine on the theory that "it won't do any harm if it does no good." You are living in too intellectual an age to submit to that form of medication. First, be sure that you need a remedy, and then be sure that you are taking the one that will benefit you. Be satisfied when, after an examination by your physician, he simply tells you to correct your habits of life. Don't think that because he didn't give you seven prescriptions, he don't understand his business. Conclude rather that he is not financially interested in a drug store. Again, when a physician prescribes a four ounce mixture for you, do not have it repeated and repeated indefinitely. If he had intended that you should take a barrel of the stuff he would have prescribed it in that quantity in the first place, and you could have saved money by dealing with a wholesale store. Again, don't think that a medicine must necessarily taste like shoe dressing to be efficacious. Modern pharmacy has made it possible to take at least some preparations without facial contortions or acrobatic accompaniment.

A word about domestic remedies. Many of them are good. The hot foot bath, the poultice, the hot application, the alcoholic bath and many other of the simpler remedies have their fields of usefulness. I honour the good old mother who does her best to assuage the pain of suffering humanity. She knows nothing of psychological therapeutics or suggestion, but her tender touch and kindly smile should bear a higher sounding name. She is a close observer of symptoms, and is a natural help to the most skilled physician. She is the mother whose kiss brought back the merry laugh of childhood. She is the mother of thoughtfulness, tenderness and love—our own mother. I speak of her with reverence, and I think of her with gratitude. While worshipping at the shrine of Aesculapius, I do not forget her kindly voice and angelic touch.

It will not be out of place to touch briefly upon another subject, upon which many persons have a false conception of the duties of the physician. It has always seemed strange to me that enlightened and even highly educated people should believe that in some special cases the physician is not only justified in taking life, but that it is his duty to do so. Men have recently advocated a return to the old Greek custom of destroying all imperfect infants, but no one takes them seriously. True, the paramount idea in many minds seems to be that a beefy football team is more of a credit to a university than is a development of brains, and if we did not possess a

faith in the good sense of mankind in general, we might fear that the propagation of the human species would be reduced to the stockfarm basis. This perfection of system of course would make it easy for the ladies, for all of their gowns could be fitted to the Venus de Milo, but like all great schemes it would have its drawbacks—Byron with his deformed foot, Milton with his sightless eyes, Robert Louis Stevenson with his tubercular lungs, and a host of others would have been promptly dispatched under such a system, and aside from the mere question of brains, the world would be a heavy loser by the removal of such men as the German Emperor, who, though he has a palsied arm, has originated a style in moustaches that has created a greater sensation than did Kipling's Recessional.

The office of the physician is to conserve life, not to destroy it. The most hideous monstrosity is protected by the commandment, "Thou shalt not kill," and the patient, who, suffering from an incurable or painful malady, would wish to end it all, must adopt the method of Hamlet and shoulder his own responsibilities.

Expert witnesses have in many cases been subject to the ridicule of communities, and often with a show of reason. I presume that you are all more or less conversant with cases that have been tried in Courts, in which one set of medical witnesses has been heard to give testimony directly opposed to that of another set.

Before concluding that some one was lying, or at least, before concluding that such testimony is valueless, I ask you to visit a so-called Court of justice, and watch the revolutions of its ponderous wheels. Watch the antics of lawyers whose object it is, not to get the whole truth, but only such part of it as may be favourable to their cause. Listen well to the rulings of the Court, for it will be a revelation to you. If you are a conscientious man you will go home each night and pray earnestly not to be allowed to fall into the sin of misjudging others—for if you do not do this you will be sure to conclude that the Court is more concerned in having his judgment stand on appeal, than he is in meeting out justice to the litigants.

The medical man appears in a murder trial to establish the cause of death. The victim was shot through the heart. He swears that the wound was the cause of death. The murdered man was fifty years of age. His father died of cerebral apoplexy. The lawyer for the defence asks: "Did you examine the brain of the deceased?" Answer: "No." "Can you swear positively that he didn't die of apoplexy?" Answer: "No." "The man is a fool," say you. "Not at all." If he said "Yes," he would be made out a perjurer.

This is an extreme case, but I only give it to illustrate the difficulties of the situation. If the medical witness were allowed to go on, and in his own way give an opinion, with the reasons for such opinion, things would be greatly simplified. It is safe to say that the great bulk of medical expert testimony is honestly given, and is helpful to the adjudication of controversies. When it is not so, the trouble is with the expert, and not with the system. I have little sympathy with the so-called expert who gets into hot water on cross examination. Let me tell you how to judge of the value of an expert's testimony. The advocate whose cause he is hurting, will treat him with respect during the cross examination; but when he comes to the closing argument, he will try to convince the jury that the expert was mistaken, unless the case should happen to be tried in Brown County, in which case he will simply call him a liar and a thief.

If I were in search of a strictly commercial enterprise, I should adopt the manufacture and sale of a so-called "health food." The field has been worked to a considerable extent, but not enough to prevent a successful exploitation.

Now, you know that all the health food people argue from nature, that is, they pretend to follow along lines indicated by observation of the habits of animals. Food should be eaten raw, and should be such as exists naturally. Butter should be superceded by vegetable oils. Whole wheat flour should take the place of the patented article, because, forsooth, the whole wheat kernel was intended for nutriment.

Now, I should follow out a line of argument that would receive support from all the health food cranks in the country. I should not only use the whole wheat, but I should also include the straw, and the roots, and even the thistles, for do they not grow together? I should add the chicken, feathers and all, for the feathers would not be there if they were not intended to be eaten. I would add a sprinkling of gravel, for the ostrich with his perfect digestion demands it. Then a few tin cans, and pieces of leather, because the goats from the eighth ward thrive upon them. A sprinkling of grasshoppers and a high-sounding name, suggestive of a connection with a church and my fortune would be made.

Is this overdrawn? Not a bit of it. The appetite is no longer a guide to what we should eat. The feelings of the person are no longer consulted; reason itself has been dethroned in this mad rush for the elixir of eternal youth. The end of the health foods will come, but the ingenuity

of the clever Charlaton will last, and when he has exhausted this field he will invade another where suckers will be equally plentiful. Before leaving the subject of foods, let me say that the appetite was given us to guide in the right direction. When it leads us astray it is because we, by previous abuses, have led it astray. Some foods are best eaten raw and some cooked. Some require little boiling or baking, and some a great deal. The food should be masticated, not bolted. Articles, which, by giving flavour, add to your enjoyment of a meal, are not necessarily injurious. A little pepper, mustard, vinegar, catsup, pickle, etc., each is good in its place. They stimulate the flow of the digestive fluids and thereby assist to proper digestion.

Some people are continually crying out against the giving of drugs, especially those of the mineral group. They do not object to the vegetable preparations, for the Good Lord intended them for use as medicines, else he would not have created them. Minerals are for use in the arts, etc. I suppose I should bow down and worship these good people who have such a thorough knowledge of the Lord's intentions. I should feel that they must be very worthy, else they would not be so entrusted with the welfare of mankind, but having taken a few gallons of decoctions and vegetable pills in my youth, on the ground that they could do no harm because they were "vegetable," and having suffered the cramps and nausea that followed their administration, I fear I have failed in the development of my bump of veneration. As a matter of fact minerals are needed in the animal economy, and we could not live without them. Our bodies are largely mineral and our appetites lead us to supply ourselves with the things that contain them. All animals crave salt, which is sodium chloride, a mineral. The blood contains iron magnesium, bone, lime and soda, nerve tissue, phosphorus, etc. These are only a few of the elements I might name. Comparatively few mineral substances exist which are not found in the animal, man, and science is adding to their number each year. You know that the establishment of the Keeley cures, with their so-called chloride of gold treatment, has introduced the precious metal into the bodies of many of our aristocrats, and we may expect to hear in a short time that they are no longer buried or cremated when they die, but instead, are sent to the mint to be assayed.

Vegetables, on the other hand, contain the most dangerous and poisonous alkaloids. Opium, with its active principles; morphine and codia; belladonna,

atropia, nux vomica, from which strychnia is obtained, and hydrocyanic acid, which exists in the almond, are examples of what may be secured from the pharmacopeia of safety. All of these preparations are useful in the treatment of disease, but they should be handled by persons, who, being aware of their dangerous properties, will efficiently safeguard their administration.

Upon the subject of criticism of one physician by another, I wish to say a few words. You know that there was a time when it became the duty of the physician so soon as he superseded another in any case, to denounce the first one as a fool, and to direct that all the medicines left in the house should be promptly thrown out of the window. Of course, such things do not occur now, or at least very rarely. Knowing what I do, and were I a layman, if any man should attempt any such action, I should show him the door. Such actions should be an insult to your intelligence. All physicians are bound by their self-interest to do the very best they can for their patients. They all possess more or less common sense, and they certainly possess some technical knowledge, else they would not be licensed. What would you think of a man in any other walk of life who should act as though he only needed a calf binding and plenty of shelf room to be an improvement on the *Encyclopaedia Britannica*? They puff themselves out, tell you about the wonderful things they do, incidentally mentioning the fact that their competitors are unfortunately inferior, and if you are at all credulous, you thank the Almighty that the earth was made round, for if it were flat, and a couple of these heavy weights chanced to get away from the center, it would tip up and we would all be thrown into space.

It is said that the world takes one at his own estimate. This is not true. Our asylums are full of people who think that they should guide the destiny of nations.

Don't appear to be entertained by one of these "know-alls." Don't allow them to think that yours is not a higher order of intelligence. Fortunately, you will meet with few of these in the present day. The intelligent physician understands that he is only lowering himself by such streetcomer methods, and if he has no manhood in him he refrains from unjust criticism simply because it doesn't pay. He knows that a man rarely attains eminence by pulling others down, and he realizes that the intelligence of the public is not the same in the 20th century as it was in the 16th.

It is desirable that the relations of the physician and the patient be very close; that they should trust each

other, have faith in each other, and be friends in the best sense of the word. When you no longer trust your physician you do him an injury by employing him, and when you change to another, don't imagine that he will go over the hill to the poorhouse. This is one of the common mistakes people make. Just remember that so soon as you discharge him, your enemy will become his friend. If you have two enemies, the doctor is the gainer.

Does the doctor have a deep interest in the welfare of all his patients? Does he not feel terribly hurt when one of them conclude that the man who has taken care of his body for years is no longer fit to do so? Well, that depends upon circumstances. There are many men, and a few women whose loss from a fairly developed clientele does not leave an aching void. I have often looked upon such a change with a feeling of profound thankfulness and satisfaction, and when I have seen the other physician dismissed, and myself substituted, and when I have heard the man who has served them well and faithfully vilified and his ability questioned, I have immediately commenced plans to get rid of this very latest acquisition, the easiest way to do so being to intimate that you don't feel equal to assuming such a grave responsibility. Money is not everything. Self-respect is something, and a self-respecting medical man cannot undertake the case of all people. Some of them belong to the veterinary surgeon by rights, and some to Dowie.

I will not apologize for anything I have said to-night. I am not entitled to any thanks for having unburdened my mind to you. I have carried many of these ideas for years, and in giving them to you, I am simply freeing my mind. By giving me this opportunity, it is I that am indebted to you.

One of the most universal of beliefs is that the physician should do all the charitable work of the community, not only freely but cheerfully. The sick should be attended without a murmur of complaint. The employer who pays such wages as to make the saving of a dollar an impossibility, has no hesitation, when his servant falls ill, to ask the physician to attend him without charge, and he feels very much hurt if the physician at the same time asks him to furnish the sick man's family with necessary sustenance during the period of his illness. The city poor are given over to the tender mercies, not of the most competent, but the cheapest physician. The grocer gets full pay for the flour and potatoes he furnishes the poor, the coal dealer gets full price for his coal; every one else is fully paid for his services in their behalf; only the phy-

sician is underpaid. I make no complaint on this score, for I am not a candidate for this office, but it seems to me that the poor and the unfortunate have a right to complain against a system which is obviously vicious. As proof of this assertion I have only to state that the salaries of the County physician and City physician combined, would not be sufficient to buy the drugs necessary to the proper care of the insane of this County alone. When we consider that the salaries include the furnishing of all medicines and surgical appliances, you will not fail to see the justice of recognizing the self-sacrificing devotion of these gentlemen, for, of course, we assume that nothing but the best drugs are used in this branch of the public service.

In closing, I wish to impress upon you the fact that physicians have some rights as men, even as gentlemen, in the community in which they live. You and I have no inherent right to pass judgment upon their motives, their manners, or their abilities, without something more than a speaking acquaintance with them. The school teacher, clergyman and the physician are, by common consent, the objects of criticism at all pink teas. The servant girl question is always to the front at the assemblages of the 400, but among those of the higher order of intellect, who contribute to the elevation of mankind by the formation of a club to which they give the high sounding name of the "Colonial Queens" or something equally euphonious; to these people with their pink teas distinctively belongs the duty of villifying the frail little lady who industriously and conscientiously tries to train the young entrusted to her care, to these belong the privilege of lampooning the preacher who daily, on bended knees, implores a blessing on them from on high, and to these is given the task of destroying the reputation of a physician who is probably labouring honestly and faithfully, if not successfully, to overcome and defeat suffering and death.

Fortunately, there is a bright side to the shield. In every community there are thoughtful, kind and considerate Christian men and women. Some of them may not be regular church goers, but all possess that which the French term "*Noblesse oblige*," and which, for want of a better term, we will call manhood and womanhood. They are the bright stars which shine upon the pathway of man, whether he be physician, clergyman, teacher, merchant or labourer. In the darkest hours, their memory is the sweetest. I have felt the hearty pressure of their hands when my life seemed a mistake and a failure. They are to me the oases in the desert of conflict with disease. The

influence of one such individual is irresistible. In their presence one feels safe and secure. Their afflictions are my afflictions, and my burdens are shared by them. So long as they exist, the practice of medicine will not be drudgery, and men will continue to exert their best efforts to the end that suffering humanity shall find a measure of relief.

Selected Articles.

PROPHYLAXIS AND TREATMENT OF SCARLET FEVER.

By NEWTON M. OTIS, M. D., FAIRBURY, ILL.

Scarlet fever is, with the possible exception of small-pox, the most contagious of the acute infectious diseases, and the physician's duty in regard to prophylaxis is an imperative one. The whole subject is one of quarantine of the patient and his attendants, and the disinfection of the patient, the room he occupies and everything that was brought in contact with him. This must be insisted upon in the mildest as well as in the most severe cases.

The patient should occupy a room from which everything not absolutely essential to comfort has been removed. This includes all curtains, rugs, pictures, hangings, clothing, etc. It should be well lighted and heated, and as far removed and completely isolated from the other living rooms of the dwelling as possible. Into it only the physician and nurses should enter. Whenever possible an adjoining room should also be set aside for the use of the nurse and immediate attendants.

I do not believe that the hanging of a sheet moistened with carbolized or other germicidal solution, over the door or in the room, has any other value than to impart a false sense of security. It should be remembered that the area of contagion in scarlet fever is small, probably but a few feet from the patient, and the infection is carried from the sick-room, either by the attendants, or by the bedding, clothing or excreta of the patient, or by some object brought in close contact with him. *Everything in a room occupied by a scarlet fever patient must be looked upon as a possible source of infection.*

The physician himself too often ignores the very precautions he insists others should observe, and, as an example, and for the protection of his patients, before entering the sick-room should don a garment which completely

covers his clothing, and before visiting other patients should wash his hands, face and beard with a germicidal solution. The nurse is more liable than the physician to convey the disease, and upon leaving the apartments of the sick should make a complete change of clothing and use a germicidal solution, paying especial attention to her hair.

Quarantine should be maintained for a period of six to eight weeks from the date of invasion. It must be longer if at the expiration of this time desquamation is not complete, or the case is complicated by suppurating glands of the neck or a purulent discharge from the ear, nose or throat. In very mild cases four weeks is probably a long enough time for quarantine.

For the disinfection of the clothing, bedding, towels, etc., a standard solution of copper sulphate 1 lb. and bichloride of mercury, drachms 4, to the gallon of water, and used in the proportion of two ounces to the gallon, is efficient and cheap. Into a boiler or tub containing this solution, all bedding and clothing is placed, followed by the usual process of the laundry. The excreta should stand for some hours in a strong carbolic or chlorinated lime solution before they are disposed of. Dishes, trays, napkins, etc., should first be rinsed in a disinfecting solution before leaving the sick-room.

When desquamation begins the patient should receive a daily soap and water bath, and twice daily should be anointed with a five per cent. carbolized vaseline or olive oil.

The room occupied by the patient should be disinfected, preferably with formaldehyde gas, but if an apparatus is not at hand, fumigation with sulphur, if properly done, is efficient. At least 4 lbs. of sulphur must be used for each 1,000 c. feet of space. All doors and windows must be closed and their crevices stopped. The walls should be moistened, or wet paper hung in the room, as moisture is essential to success. Leave the room closed for twenty-four hours, after which scrub the walls and wood work with a bichlorid solution. All books, pictures and playthings, which have been in the hands of the patient, should be burned.

Formaldehyde gas is, of course, superior to sulphur as a disinfectant. At least one pint of fluid must be used for each 1000 cubic feet of space, and it is to be remembered that its action is stronger in a warm, dry atmosphere. It has been shown that sheets sprinkled with formaldehyde and hung in a room which has been tightly closed and previously warmed, forms an easy way of using

this agent. An ordinary sheet will absorb about 150 to 200 cubic c. of formalin, and this is sufficient to disinfect 500 cubic feet of space. Recent experiments of Yehrman, of the Chicago Board of Health, have demonstrated the effectiveness of the sheet method of using formalin. Its simplicity, together with the fact that unlike sulphur, it will not fade or injure the contents of the room, will undoubtedly make this the common method of disinfection. It is recommended that after the sheets are hung in the room the formalin be sprinkled on them by means of an atomizer.

The efforts of a physician to prevent the spread of a contagious disease is usually a thankless task, and not always can we carry out in detail the methods advocated in this paper, but the nearer we can approach it, the more certain will be our success.

Treatment.—In no disease of childhood is it more important to treat the patient and not the disease than in scarlet fever. In a disease which presents itself in such varied types, and which has so many complications that every case must be a law unto itself. Since Sydenham, in the seventeenth century, gave us the first clear description of scarlet fever, until the present time, many drugs have been offered as specifics, but all have proved valueless, and a clearer conception of the disease has taught us that it has a self-limited course which cannot be modified by any known treatment. Our efforts are to modify its symptoms, shorten its course and prevent its complications.

I shall endeavour not to trespass on the subject which is to follow, but a discussion of scarlet fever would be incomplete without considering those complications of the throat, ear and kidneys, which occur with such frequency as to become a part of the clinical history of most cases.

Acknowledging that our treatment is purely symptomatic, I shall not consider the disease in its various stages, but discuss the therapeutic measures applicable to the symptoms.

Fever.—For the reduction of the temperature, the use of cold water supersedes all other measures in efficiency. Mild cases with a temperature below 102.5, require no treatment, but sponging with water at a temperature of 86 will do much to allay restlessness and produce a feeling of comfort. A temperature of 104 or over is always an indication of active measures and either the cool bath, or cold pack will be found useful. I prefer the cold pack, as it is less troublesome to apply and more certain in its effect. The patient is wrapped in a sheet which has been dipped in water at a temperature of 75 or 80 degrees

and placed in bed with light woolen blankets. The nurse should place a hot water bottle at the patient's feet, as the extremities are apt to become chilled. An ice bag or cold cloths are applied to the head. The patient should remain in the pack from fifteen to twenty minutes, cold water being sprinkled on the enveloping sheet at frequent intervals, with gentle rubbing of the body as long as the pack is continued. The pack not only reduces temperature, but in cases characterized by the tardy appearance of the eruption, it will be found the quickest means of developing the full rash. There is one other measure for using cold water for the reduction of temperature which is not as commonly used as its merits would warrant. I refer to the high colon injection of ice water. In malignant cases with very high temperature this procedure will be found very efficient. The water must be as cold as would be used for drinking purposes, and must be injected high into the colon by means of a long rubber tube. This is one of the quickest and surest ways of reducing temperature.

I do not believe the cold tar derivatives should be used for their antipyretic effect, but small repeated doses of phenacetine will be found useful for their sedative action. Where there is great restlessness, sodii bromide, either alone or in combination with phenacetine, has proved useful. Plenty of cold water should be allowed, and older children may hold pieces of cracked ice in the mouth.

Vomiting, so common in the beginning of scarlet fever, seldom persists after the first few hours, and, like convulsions, has a very different interpretation during the period of invasion than when it occurs at a later date. Bismuth, or small repeated doses of calomel, about one-tenth grain, given every hour until the bowels move freely, is usually all that is required. The diet should be curtailed in amount, or discontinued altogether, as long as this symptom lasts. Convulsions occurring at a late period of the disease are usually uremic. At the beginning they are usually due to the high temperature and toxic action of the scarlatina infection. They are best controlled by the use of bromides, which must be given in comparatively large doses, or by chloral hydrate which is best given per os, dissolved in milk, and by those measures already described for reducing the temperature. It is well in the beginning of every case of scarlet fever to secure a free evacuation of the bowels at once, and by so doing we remove a possible source of irritation, which frequently acts as a causative factor in producing convulsions.

That the heart is especially affected by the scarlatina infection is shown by the fact that the pulse is always rapid in proportion to the temperature, and in all severe cases measures to sustain it are called for. This is especially true in cases complicated with suppuration of the glands of the neck, otitis media and gangrenous processes of the throat.

An irregular, rapid pulse with feeble first sound is always an indicator for stimulation, no matter what the period of the disease. Alcoholic stimulants, digitalis, strophanthus, ether, camphor and ammonia are most useful. The quantity to be given is governed only by their effect. Alcohol is best given in the form of brandy or whiskey, diluted with hot or cold water. Digitalis I prefer to give as the fluid extract, in 1 m. doses to a child of five years, repeated every three or four hours. Strychnine is best given hypodermically $\frac{2\frac{1}{2}}{100}$ to $\frac{1\frac{1}{2}}{100}$ of a grain and camphor, which is one of the best cardiac tonics, is also given hypodermically in doses of 1-4 to 1-2 gr. to a child of five years.

The throat in mild cases will require little or no treatment. Ice held in the mouth will relieve the heat and dryness, while the external application of camphorated oil, and warm compresses are useful. In those cases characterized by an intense angina, pseudo or true diphtheria, with marked cervical adenitis, we have one of the serious complications to deal with. Topical applications to the throat are useful if they can be used without a great resistance on the part of the patient, but when every application means a struggle, their frequent repetition should not be practiced. To give a list of drugs for local treatment of the throat would include nearly every astringent and local sedative in the pharmacopoeia. Every physician has his favourite remedies, and as cleansing of the throat of its secretions is our object, there is little choice. Personally I have found hydrogen peroxide, carbolic acid and boracic acid useful. The first I use as a swab for the throat, and spray in the nose. Carbolic acid is used as a spray in combination with tannic acid, glycerine and water, and boracic acid as a gargle or swab.

The adenitis is best controlled by the use of the ice bag or cold pack. Suppuration is less likely to occur than when heat is used, while pain and tenderness is relieved equally as well.

When suppuration seems imminent, warm antiseptic compresses should be used and free incisions made, with irrigation as soon as pus becomes localized. Enlarged glands which show little tendency to change may often be

resolved by the use of an ointment containing ichthyol, mercury and belladonna.

The diphtheritic processes in the throat of the scarlet fever patient calls for an accurate differential diagnosis before the line of treatment to be followed is decided upon. The exudate occurring during the height of the scarlet fever process is usually of streptococcic origin, while at a later period it is more often true diphtheria due to Klebs-Loeffer bacillus. In the former instance those measures already described for the treatment of the angina will be found useful, while in the latter antitoxin is our main reliance. Without the aid of the microscope the differential diagnosis is often difficult, sometimes impossible, and the old adage, "When in doubt, play trumps," is most applicable.

When the diphtheritic membrane involves the larynx the use of the calomel fumigation is often of marked benefit. Ten to fifteen grains of calomel should be burned under an improvised tent or canopy, and repeated every two, three or four hours, as the condition may warrant, Intubation is of course indicated.

When stenosis is not relieved by these measures, after a careful differential diagnosis, and the use of antitoxin early in the case of true diphtheria, or the other measures, if the membrane is a pseudo-diphtheria, are usually all that will be required.

Complications of the ear are troublesome and should receive prompt attention. We seldom have a simple catarrhal inflammation, but an inflection of the tympanic cavity due to streptococcus. As soon as an otitis is suspected or complained of, a careful examination should be made. The ear speculum with strong reflected light should be used, and if there is no bulging of the drum, we may try palliative measures. A blister or leech may be applied in front of the tragus, or hot water instilled into the external meatus and hot dry external applications used. Warm oils, melted vaseline or irritants, such as chloroform or carbolic acid, should not be poured into the ear.

If these measures are not successful in controlling pain and checking the inflammation, there is but one rational treatment; that is, paracentesis of the tympanum with drainage. This is a very simple operation. The point of incision should be that portion of the drum which is most bulging, and the opening must be an incision, not a mere puncture. Carry the incision well downward to the floor of the meatus. A free flow of pus follows with

immediate relief of symptoms. Cleansing with a boracic acid or bichlorid solution is all the after-treatment required in simple cases.

Until recently I had a dread of this simple procedure, but after performing it and noting its excellent results, I should not hesitate to do it in every case not relieved by more simple measures.

Treatment of the post-scarlatina nephritis is that of an acute nephritis occurring independently of this disease, and to enter into a detailed treatment is to involve us in a discussion of acute nephritis in general.

During the height of the scarlet process, the urine in perhaps the majority of all but the mildest cases, will show traces of albumen, blood corpuscles and a few casts, but this involvement of the kidneys is not productive of special symptoms, and other than warning us of the presence of renal irritation, may be ignored.

The serious kidney lesions occur after the substance of the active fever process. It may follow the mildest as well as the more severe cases, and may prove a more serious condition than was the primary disease.

The prophylaxis of this complication should receive careful attention. Every convalescent case should be warned against exposure in cold and damp, and the diet should be light and largely non-nitrogenous. Water should be used freely, the bowels kept loose with frequent warm baths to promote activity of the skin. These measures, no matter how carefully adhered to, are often of no avail, and the frequency with which nephritis occurs in spite of a most careful regime has lead many observers to place but little confidence in preventive measures.

With the first symptoms of kidney involvement the patient should be confined to bed, an absolute milk diet instituted, with free evacuation of the bowels induced preferably by a concentrated saline.

The urine may be increased and rendered less irritating by the use of the alkaline, or small doses of acetate or citrate of potash may be given. In mild cases this is all the treatment required.

Cases characterized with marked dropsy, scanty urine and uremic symptoms require more active measures. Counter irritation over the kidneys maintained by the use of mustard or dry cups followed by poultices, depletion by the production of copious water stools best induced by the Rochelle or Epsom salt, diaphoreses from the use of hot wet pack, and the administration of the milder diuretics such as acetate and citrate of potash, infusion of digitalis and especially diuretin, will be indicated.

Pilocarpin is recommended for its diaphoretic action, but it is a marked depressant and should not be used as a routine treatment. Recently its use as an inunction into the skin (5 cent. grain pilocarpine to 100 grain ol. olivea) has been favourably commended.

Uremic convulsions will be best controlled by the hypodermic use of morphia and the rectal administration of chloral and bromides and in cases with full bounding pulse venesection should be tried. From two to six ounces of blood may be taken, according to the urgency of the symptoms (Holt). The rectal injection of normal salt solution is also useful in inducing a free flow of urine and aiding the elimination of toxic substances.

Convalescence requires iron, bitters and above all a gradual return to the customary habits and diet of the patient.—*Medical Fortnightly*.

ETIOLOGY AND INCUBATION OF SCARLET FEVER.

BY CHAS. L. HAMILTON, M. D., DWIGHT, ILL.

Read before the Livingston County Medical Society.

According to Osler, "we owe the recognition of scarlet fever to Sydenham, before whose time it was confounded with measles. It is a wide-spread affection, occurring in nearly all parts of the globe and attacking all races."

Its causes are, of course, both predisposing and exciting. Very few in our profession to-day deny that the exciting or true cause of scarlet fever is a germ, and whatever the contagious principle, so pronounced is its character, that even a moment in the presence of a scarlet fever case, may be sufficient to reproduce the disease in a susceptible individual. Several claims have been put forth regarding the isolation of the scarlet fever germ. In 1882 Echlund claimed to have found its specific germ in the urine of scarlet fever patients, and also in certain soil and surface waters. Later, Klein claimed the cause was a streptococcus, which produces an eruption in swine similar to the scarlet fever eruption in the human being. Still later, Edington and Jamison isolated a germ which they found in the blood of scarlet fever patients on the first, second or third days only, and which re-appeared again in the epidermis on the twenty-first day of the disease. W. J. Class, of Chicago, has discovered a micro-organism in scarlet fever cases, and claims it to be the specific scarlet fever germ. This he obtained from cultures from the epidermic scales and the throats of 300 patients affected with the disease. He claims its chief

cultural characteristics to be its glutinous character, and that it is well marked in primary cultures of germs taken from the throat, growing a class of organism closely resembling the gonococcus, but larger. As described by him, it is a diplococcus, having almost the appearance of a tetrad, owing to a pale streak running transversely through each half of the organism. It takes the aniline dyes well and is decolourized by Gram's method, but not completely. The culture medium is ordinary glycerine agar, with 5 per cent. sterilized garden earth. Growth occurs at 35 degrees C. in from two to seven days, in the form of small whitish gray, semi-transparent colonies.

He gives the following reasons for believing this diplococcus scarlatinae to be the causative factor in scarlet fever:

1. "Because the germ is invariably present in the throat secretions, blood and scales of a patient having scarlatina, and because it is a separate and distinct organism, not heretofore described.

- 2 "Because it has been proved to be a pathogenic micro-organism, killing mice, when injected in minute quantities in a space of time varying from less than one to twenty-four hours, according to its virulence.

3. "Because it produces in swine, a disease whose macroscopical lesions closely resemble those seen in scarlet fever as it occurs in the human patient.

4. "Because the presence of blood from a patient who has just recovered from an attack of scarlet fever inhibits its growth.

5. "Because the subcutaneous injection of a virulent culture into guinea-pigs will, under certain conditions, produce a nephritis.

6. "Because personal experiment apparently shows that the blood serum of a person who has passed through scarlet fever protects an animal from invasion of the germ."

Gradwahl in the *Philadelphia Medical Journal* (March 24, 1900) confirms the finding of Class' diplococci in scarlet fever cases. He discovered it in each of seven cases at periods in the disease varying from the first week until convalescence. Cultures from blood revealed the diplococcus in four cases, and in one case pure cultures were obtained from the urine. He reproduced the disease by inoculation into the vein of the ear in swine (two cases), a rash appearing eight or ten days after inoculation. One animal recovered, was killed and autopsy revealed acute nephritis. The diplococcus scarlatinae was found in both blood and kidneys.

Baginsky and Sommerfeld have also announced the discovery of a micro-organism, which they claim is always present in throat secretions and the blood of scarlet fever patients.

Class in the *Journal of the American Medical Association* (September 29, 1900) discusses their claims and concludes that their micro-organism is identical with the one previously discovered by himself.

SOURCE OF THE CONTAGION.

The chief source of infection is the patient himself, although it seems probable that the area of contagion is limited to a radius of a few feet. Secretions from the nose and throat, the epidermic scales, the excretions (urine, faeces and perspiration), the serum of vesicles, as well as the purulent discharges from nose, throat, ear and suppurating glands may be the source of infection to others. From whatever source the micro-organism comes, it may be disseminated by the clothing of the patient, doctor or nurse, the bedding, books, letters, merchandise, papers, foods, dust and domestic animals. Many cases of the disease have been traced to cats or dogs that have been fondled by affected children, and then allowed to go from the sick room and mingle with other children, who have not had the disease, and who have not been otherwise exposed to the infective principle.

Letters have carried death into distant families, and Sajous' *Annual* mentions the case of a little boy 2 1-2 years of age, living in a district which had been free from scarlet fever for many years, in which investigation showed the cause of inoculation to be a letter received a few days before the little patient was taken sick, from his grandparents, stating that a child living with them was just convalescing from an attack of scarlet fever and was "shedding her skin," a few pieces of which were enclosed. The letter and contents were used as playthings by the little boy, and in one day he was taken sick. Infection has been traced to bedding which was aired in an open window on the side next to another house in very close proximity. Simply washing infected clothing, the handling of toys and books, dust on window ledges or facings, or in cracks in the walls or retained on the wall paper, all these in rooms infected, and where no adequate disinfection has been practiced, have caused new cases, occurring weeks or months after all thoughts of the disease had disappeared from the minds of the family occupying the house. Foods often disseminate contagion, and milk has been thought to be a good medium.

Power and Klein, in London in 1885, traced an epidemic to milk obtained from one dairy, the original cause of the milk infection not being definitely determined.

The scarlet fever micro-organism is much more tenacious of life than that of any other disease, with the possible exception of small-pox, and hence the above-mentioned carriers of infection may continue the disease and cause its development after long periods of time, and cases are on record where playthings have caused an outbreak of this disease after seven years from the time of known exposure.

MODE OF ENTRY INTO THE SYSTEM.

The most common way seems through the respiratory mucous membrane proven by the early involvement of the pharynx, and also by the fact that tonsillar troubles markedly predispose to infection.

That the alimentary tract may be the route of infection is also proven, by cases resulting from ingestion of infected food, to be referred to hereafter.

PERIOD OF INCUBATION.

Much difference of opinion exists as to the incubative period of this disease. The Indiana State Board of Health and the Chicago City Health Board give it as from one to seven days; Ginon, four to five days, and in the United States Army Report some years ago, Surg. Gen. Hamilton gave it as from one to three or four days. Williams, in a collected report from the London Clinical Society in 1892, collated several hundred cases, and gave the average time as two or three days, minimum time, twenty-four hours, and the maximum, seven days. Clement Dukes, after twenty-eight years of experience in Rugby School (*London Lancet*, April 29, 1899) gives the shortest period as twenty-four hours, and the longest nine days, stating that in 59 per cent. it was between two and four days. In almost 90 per cent. of all cases the incubation period is between two and six days (Osler). Many writers heretofore claimed to have treated cases where the incubation period varied from fifteen days to three weeks, but in most of these cases, doubtless, careful investigation would have shown that there had been several exposures, some of which were much more recent than those which were thought to have produced the disease. I am inclined to think that seven days is the longest period during which the disease can be developed from previous exposure.

TIME OF GREATEST DANGER OF INFECTION.

Much difference of opinion exists as to the time of greatest infectiveness in this disease. It is probable that during the incubative period, it is not infectious, but from the moment that fever develops or throat manifestations are found, the disease is certainly communicable to others, and the period of greatest intensity so far as infectiveness is concerned, is probably when the disease is at its height. No one doubts that from the development of the first symptom by which it can be recognized, contagium is present, and the disease, therefore, communicable to others.

The stage of exfoliation certainly shows marked power to infect others, as does the discharge in the ear troubles occurring as sequelae to scarlet fever.

DURATION OF CONTAGIOUS PERIOD.

Holt places the average period at six weeks or until desquamation is complete. Others discharge mild cases in three weeks, but as early infection comes chiefly from nose, throat and possibly breath, and late infection from

1. Purulent otitis;
2. Rhinitis;
3. Chronic pharyngitis;
4. Suppurating glands;
5. Eczema;
6. Empyema and
7. Possibly urine in nephritis;

no definite time will answer in all cases. We must not err in this matter, and as long as any possibility of infection from any of the above causes exists, we must insist on the isolation of the patient, and carelessness, on the part of the physician, in such cases is criminal.

IMMUNITY.

One attack confers immunity usually for life, yet some have had this disease two and even three times, if we are to believe some of our best diagnosticians. The second attack usually proves very mild in character and is found only in very susceptible persons, and this susceptibility seems to run in families.

PREDISPOSING CAUSES.

Scarlet fever is a disease of childhood, and while this is true, no age, strictly speaking, is exempt, but a large

majority of all cases, occur before the age of eleven years, and susceptibility decreases rapidly from that age. The period at which the highest susceptibility is shown is stated to be five years. It is very mild the first year, but this may be due to the fact that infants are seldom exposed to the disease occurring in other families. The susceptibility then increases rapidly from the first to the fifth years, when it reaches the greatest degree, and a marked decline increasing to the age of twenty-five years is noted.

SEX.

Sex seems to exert very little influence, although some claim the female is slightly more liable to the disease than the male. It does seem, however, that the disease is certainly more prone to fatality in the latter than in the former.

PREVIOUS CONDITION OF HEALTH.

As in all disease, poor health means lessened resistance, consequently, children with a low degree of vitality are more susceptible to the contagium of scarlet fever. Beyond this, previous condition of health has very little to do with susceptibility.

Poor sanitary conditions which often obtain in residences, such as damp cellars, bad ventilation, studied exclusion of sunlight (Nature's germ destroyer) with defective house drainage act strongly as predisposing causes. Beyond this, previous condition of health has very little to do with susceptibility. Many houses have faulty plumbing, that it is worse than no plumbing at all, and much of modern medical literature tells of the impairment of the general health, particularly in children, due to inhalation of sewer air. Diarrhoea, sore throats, loss of appetite and anaemia are all frequent, while Notter says: "There is undoubtedly a poisonous agency at work when sewer gas is inhaled, which, though it may not directly act, yet so prepares the soil that the system is unable to resist the invading organism when it comes."

The time of year has much to do with the spread of this disease, the period of its greatest prevalence being autumn and winter, largely on account of chilling of surface of the body, and resultant lesions of the respiratory membranes, and the collection of children indoors, particularly in our public schools during these seasons of the year. Hershey says 70 per cent. of the cases of scarlet fever come from infection at school.—*Medical Fortnightly*.

"THE SYMPTOMS OF SCARLATINA."

BY HENRY GARNSEY OHLS, M.D., ODELL, ILLINOIS.

The symptoms of scarlet fever vary with the severity of the infection and also with the age and general condition of the system of the patient. Thus some epidemics are severe, the mortality being as high as 40 per cent., while the average is only from 12 to 14 per cent. In two recent epidemics in the New York Infant Asylum 29 patients under 1 year old had a mortality of 55 per cent.; 37 between 1 and 2 years, 22 per cent.; 28 between 2 and 3 years, 7 per cent.; and 23 over 3 years, no deaths. It may be safely assumed that the mortality varied in direct proportion to the severity of the symptoms and the complications.

Invasion.—The attack is usually ushered in by vomiting, chills, a rapid rise of temperature and sore throat. The vomiting is in some cases repeated several times, it is often projectile and without nausea. The temperature in severe cases rises to 104° or 105° F.; in mild cases it may not rise above 101°. The pulse is very rapid, even out of proportion to the fever. The face is flushed and the eyes brilliant. The child may not complain of sore throat, but upon examination the fauces are generally found congested and the hard palate is often covered with small red points. A membranous deposit is often seen covering the tonsils and fauces more or less, but it is not usually seen before the 3rd or 4th day of the fever. The tongue, except at the edges, is nearly covered with a thick white or yellowish coat through which the enlarged papillae project, red and prominent. After a few days the coating is cast off and the whole tongue becomes very red and the papillae remain prominent for 6 or 8 days. In severe cases the tongue is very dry and brown. Diarrhoea is not uncommon, especially in summer. The nervous system is more or less disturbed; in young children and infants convulsions may be the first sign of the infection. Later the nervous symptoms, such as delirium and general prostration, depend upon the height of the fever and complications, such as nephritis. Blood count shows marked leucocytosis during the height of the eruption.

Eruption.—The eruption generally appears in from 12 to 36 hours after the first symptoms of the invasion; exceptionally as late as the 3rd or 4th day. In 75 per cent. the rash lasts from 3 to 7 days; in 5 per cent., 2 days or less; in 15 per cent. from 8 to 11 days. In a very small number it lasts over 11 days and in exceptional cases the rash disappears and recurs. The typical rash begins in

the form of minute red points on the upper part of the breast and neck, rapidly spreading until the surface involved is a bright, even red colour. The body, face and limbs may be entirely covered within a few hours, or the rash may extend slowly, only covering the surface after 2 or 3 days, or it may be limited to certain areas throughout its course. Variations in the rash are frequent and puzzling. It may be so faint as to escape observation in mild cases; or the rapid disappearance of a bright eruption may be due to heart failure. It is usually modified by intercurrent intestinal disturbances. In malignant cases with severe throat symptoms the rash may be poorly developed. The eruption may be in large discrete patches or macular, as in measles. In severe cases it may be a dark purple colour. It is rarely haemorrhagic. On the neck or chest there is occasionally a fine vesicular eruption. Accompanying a well marked eruption there is usually burning and intense itching of the surface, and, in severe cases, swelling, especially of the face and hands. The constitutional symptoms increase with the development of the rash, and usually diminish gradually as the rash fades.

Desquamation.—Soon after the rash fades desquamation of the epidermis begins at the spot where the rash first appeared. From the face and body the superficial layers of epidermis come off in fine scales or in small patches. Where the skin is thick, as on the palmar surface of the hands and feet, the epidermis often separates in large patches which in exceptional cases may even assume the form of casts of the fingers and toes.

The fingers begin to peel at the tips on which the new epidermis is pink and contrasts strongly with the opaque gray colour and loosened edges of the remaining old layers. The process is complete as to the trunk in from 1 to 3 weeks, but exfoliation from the hands and feet may continue from 3 to 6 weeks or even 8 weeks, if not hastened by treatment.

Mild Cases.—The symptoms of mild cases have perhaps been sufficiently indicated above, but to recapitulate: The symptoms may be so mild as to be overlooked until desquamation occurs. Usually there is an abrupt invasion with vomiting and a temperature from 101° to 103° . The rash may be slight, appearing within 24 hours and fading within 3 or 4 days. The whole surface is usually covered, but the face may be pallid, especially around the mouth. The highest temperature coincides with the full eruption and is seen during the first 36 hours of the dis-

ease. It subsides by lysis with evening remissions and morning exacerbations, reaching normal between the 4th and 7th days. Desquamation may be overlooked on the face and trunk, but can be found on the palms and soles at the end of the week. Otitis and nephritis rarely occur in mild cases, but their possible occurrence should not be overlooked. The throat and constitutional symptoms are mild in this form of the disease.

Severe Cases.—Severe cases are characterized by a rapid invasion, by a rash that covers the whole surface within a few hours, by a temperature of 104° or over. In cases that recover the fever may reach the high point several days in succession; then it abates about 1° daily until near normal, after which there may be a moderate oscillation for a week or so longer. The course of the fever is greatly modified by the complications. The mucous membranè of the mouth and fauces is intensely congested, and on the 3rd or 4th day false membranes form on the tonsils and may involve the soft palate, the nasopharynx, the nose and even the Eustachian tubes and middle ears.

In the absence of diphtheria the false membrane rarely involves the larynx. The membranes contain streptococci and a diplococcus called by W. J. Class, *d. scarlatinae*. Gradwohl and others confirm his statement that it is found in all cases of scarlatina. There may be superficial ulcers in the mouth or fauces. The tongue is thickly coated and sordes collect on the teeth. The cervical glands swell, sometimes to great size, and the tonsils often become permanently hypertrophied. The catarrhal discharge from the nose and mouth is excessive and more or less offensive. The pulse, at first full and bounding, later becomes weak and irregular. There is delirium during the height of the fever or coma develops later. Sometimes the apathetic condition resembles typhoid. Desquamation after severe cases is occasionally accompanied or followed by loss of the hair and nails. As the complications are the subject of another paper, I will only mention the common occurrence of albuminaria, dropsy, and the signs of sepsis associated with exceptionally severe throat symptoms, such as gangrenous sloughing of the mucous membrane and connective tissue. Another form of sepsis is the so-called malignant or cerebral case. In this the onset is sudden and violent with intense headache, the rash irregular or absent, the fever rising to 104° or over within a few hours, and higher daily till death, which may occur at any time after the second day. Scar-

latina is liable to be very severe or fatal in children who undergo surgical operations, however slight, shortly before infection or during the period of invasion. The surgical wound is prone to become gangrenous under these circumstances.

Diagnosis.—When cases are seen in the midst of an ordinary epidemic, the diagnosis usually offers no difficulty. Before the eruption appears, the attack cannot always be distinguished from tonsillitis, though the strawberry tongue points to scarlatina.

This fact was brought forcibly to my mind in one of my earliest cases. The patient was a young daughter of Ham, with a complexion like good stove polish. The condition of the skin certainly did not throw any light on the diagnosis. But the temperature, and especially the bright red papillae of the tongue projecting through the coating, was to my mind the very picture of scarlatina, which was proven to be authentic by subsequent developments. Cases that are very mild throughout are not easy to diagnose, but desquamation or the development of other typical cases by infection, may throw a sinister light on an apparently trivial illness. Rapidly fatal cases without eruption may seem like special dispensations of Providence till perchance other cases with the usual eruption clear up the diagnosis. Diphtheria cannot always be distinguished from scarlatina at the outset. But the temperature is lower in diphtheria, and the membrane is tougher and more adherent, leaving a bleeding surface when detached. The bacteriologic examination of the false membrane and secretions from the fauces will assist in the diagnosis of doubtful cases, and should always be used when available. Erythema and roseola occurring in numerous small circular spots on the trunk or extremities may be caused by dental or gastro-intestinal irritation. Such spots and erythematous syphilides also bear some resemblance to the scarlatinal rash, but the history of the case and the absence of fever, or the comparatively low temperature will not permit an error in diagnosis. A red rash like that of scarlatina may precede the papular eruption of variola. It may be noticed on the pubic, the inguinal and lateral thoracic regions. The intense headache of variola and the "shotty" feel of the papular eruption ought to clear up the diagnosis within twenty-four hours. An erythematous rash may precede the characteristic rose spots of typhoid fever, and it has been observed in influenza also.

A similar rash in blotches everywhere except on the face has been noted after tracheotomy performed for

laryngeal diphtheria. But it runs a rapid course and is not followed by desquamation, a statement that applies as well to all the rashes that stimulate scarlatina, except possibly that of erysipelas. The latter can be distinguished by its limited extent, by the connective tissue edema and the fact that desquamation is limited to the surface involved. Belladonna, quinine and other drugs sometimes cause a scarlatinoid rash, but they should offer no difficulty in diagnosis.—*Medical Fortnightly*.

A FEW REMARKS ON HEROIN HYDROCHLORATE.

By E. Y. JOHNSON, M.D.

Every physician has daily need of an analgesic, and many have been the combinations made up for the purpose with morphia or its salts as a last resort. The train of evils following the use of the latter drug are only too familiar to all of us. I speak of the vicious habit which once formed is rarely broken, and which has wrecked thousands of lives. Aside from this, the *immediate* bad results from the use of morphia, such as constipation, diminished kidney action and sick stomach, are very serious objections and preclude its use in many instances. Codeia, vaunted as its substitute, is of little value as an analgesic. Having a special action upon the respiratory tract and pelvic organs, it has a field of usefulness, but as a pain reliever it is not what was hoped and looked for. Lately the new drug "heroin" has attracted attention, and I have tried it in many conditions where there was pain of the most intense type, and this paper is the result of my experiences. I shall not give you clinical reports, but will give you in a general way the applications therapeutically of the remedy. Heroin is a chemical produced from morphine, but greatly different in effects. It has all or even more of the pain-relieving qualities of morphine, but none of its bad effects. Except in rare cases of idiosyncrasy it does not constipate, does not diminish the urinary secretion, does not cause sick stomach, and last and most important of all, does not cause a habit of using it. It was first introduced as a remedy for cough, especially the harassing cough of advanced phthisis, and gave excellent results. From that its use has gradually spread, until now it is used largely as a pain-reliever.

Heroin comes in two forms, the alkaloid and the hydrochlorate. The alkaloid is insoluble in water, and, therefore, not as rapid in its effects as the salt. This fact accounts for the failure of many physicians to get

good results from the drug. My experience has been confined to the hydrochlorate, so in speaking of it the hydrochlorate is meant. It is a white crystalline powder, very freely soluble in water—simple elixir, tinctures, etc. It has a bitter taste. By reason of its solubility it may be prescribed in combination with almost any liquid drug. In coughs it will control the paroxysms better than any agent, I know of. In bronchitis I have found it to give great relief when combined with expectorants, as it not only lessens the violence of the cough, but seems to have a specially soothing, quieting influence on the inflamed mucous membrane. In the cough of phthisis nothing I ever used has given so much relief. For this I give in it powders 1-8 gr. each, combined with grs. v of sacch. alba., one to be taken at bed-time, to be repeated in two hours if necessary, and I rarely find it necessary to repeat it. It always checks the cough and allows the patient the sleep he so much needs. In the dyspnoea of asthma it soon relieves the paroxysm, allays the nervousness, and promotes sleep. For this purpose it may be given hypodermatically or combined in solution with the various asthmatic remedies, such as nitro-glycerine, atropia and grindelia.

As a pain-reliever I have found it of the greatest value in acute articular rheumatism, migraine, neuralgias, sciatica and nervous headache. For this purpose I employ it hypodermatically, giving from one-eighth to one-sixth grain at each dose. I have given it continuously in one case of chronic Bright's disease for over six months to relieve the headache, and with great success. The patient, a female about thirty years old, could not take medicine internally. I began on one-sixth grain hypodermatically, and now only use one-twelfth grain. The headaches only come now at long intervals, and there is no desire for the drug. Six months ago the urine contained quite a large amount of albumen and casts. To-day there is barely a trace of albumen, not constant, and no casts. I can not say the heroin has cured the case, but I do know the patient has vastly improved and is very grateful. I have used heroin in cholera morbus and intestinal colic with quick results. In every case relief is quick. In these cases I use it hypodermatically. The relief from pain following its use by hypodermic is astonishingly quick—in some instances within a minute. In more than one instance relief was had so quickly that patients expressed alarm.

Given to a morphine habitue in place of the usual drug, it satisfies the craving and seems to destroy it finally without any longing for the new drug; and in this field

alone it should prove very useful. I do not hesitate to use it for any pain demanding immediate relief. One patient describing its effects compared to morphine, said: "Morphine seems like a great big man seizing hold of you and forcibly dragging you off, while heroin takes you by the hand and gently leads you."

Sleep is produced by heroin usually in from eight to fifteen minutes if given hypodermatically, and usually lasts from eight to twelve hours. The patient awakens refreshed. There is no special thirst afterward; no dryness of skin or fauces; no itching. The first effect is to stimulate the heart with accelerated pulse, followed by a slower pulse, but full and regular. The respirations are reduced in number. I have used it in both strong and weak with good and bad hearts, with uniformly good results. The hypodermic tablets are not as effective as when the powder is dissolved and used hypodermatically, so that now I carry one-twelfth grain powders in my case, using one or two as occasion demands. I have not tried it on children under ten years of age, but would feel perfectly safe in doing so. The dose for an adult is from one-twenty-fourth to one-sixth grain, according to the effect desired. It can be repeated every hour or two.—*American Practitioner and News*, Dec., 1901.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

RESULTS IN ONE THOUSAND CASES OF NITROUS OXIDE AND ETHER NARCOSES.

Nitrous oxide is the safest general anaesthetic. Its only danger is from asphyxia, and this can be avoided by mixing the gas with atmospheric air and with oxygen. The first sign of impending suffocation should be a warning for the admission of more air, and it is surprising how easily some patients can be anaesthetized, even when it is very much diluted. The main advantages of nitrous oxide as a preliminary to ether are its safety and its rapid and pleasant action. The principal disadvantages with ether

are its disagreeable, pungent odour and its irritating effect upon the respiratory mucous membrane, as well as the slowness with which anaesthesia supervenes. In using the two in combination or succession, the pleasant and rapid action of the nitrous oxide replaces the unpleasant sensation of the first stage of ether inhalation. Full surgical narcosis is reached with small quantities of the two agents, and the saturation of the blood and tissues is avoided.

Chloroform is admittedly more dangerous than ether, but it has been administered in cases where there are renal and pulmonary complications, as it is believed to be less irritating to these structures. It is, however, largely a question of quantity. If the ether can be kept somewhere near the amount of chloroform necessary for such anaesthesia, it is less irritating than the latter, and this can be accomplished by the simultaneous administration of nitrous oxide. The number of patients who cannot take nitrous oxide gas and ether is very small. Even those addicted to alcoholics and narcotics, who are difficult to anaesthetize, are readily brought under the influence of the mixture. In some cases where chloroform is indicated, it may be well to begin the anaesthesia with a mixture of nitrous oxide and ether, and then maintain the anaesthetic with chloroform. In such a method the initial stimulating effect of the ether enables the chloroform narcosis to proceed with greater safety.—H. W. Carter, in *Med. Rec.*

INFLUENCE OF THE COLORADO CLIMATE UPON PULMONARY HEMORRHAGE.

S. G. Bonney (*Med. News*, vol. 79, No. 15, *Memphis Medical Monthly*), arrives at these conclusions:

1. That hemorrhage by itself, save with few exceptions, furnishes no criterion upon which to base a choice of climate, the indications for high altitude in uncomplicated and in not too-far-advanced cases being highly imperative, independent of this single manifestation.
2. That an exceedingly small proportion of recurrences may be expected in Colorado, although not necessarily reflecting accurately the degree of ultimate improvement secured.
3. That recurrences are more likely to result, and that quickly, in those cases with hemorrhage immediately preceding arrival, and hence the wisdom of a short delay following the hemorrhage before leaving home and unusual precautions as regards rest upon arrival.

4. That primary hemorrhages are comparatively rare in Colorado and usually take place incident to a rapid progressive destructive change in cases already with hopeless prognosis, or as a natural result of some external assignable cause, which, under proper regime, could be avoided.

5. That hemorrhage, while less likely to occur in Colorado than at sea level, is, nevertheless, as a general rule, more severe and associated with greater shock.

6. That the avoidance of hemorrhage, particularly in the early months of Colorado life, demands a most rigid compliance with detailed instructions.

PROPHYLAXIS OF TUBERCULOSIS DURING CHILDHOOD.

S. A. Knopf (*Johns Hopkins Hospital Bulletin*, September, 1901, *Memphis Medical Monthly*) discusses direct transmission from parent to child—from the father to child at the time of conception, from mother at any time during fetal life, and concludes that either one is so extremely rare that it may wholly be left out of our plans for the prophylaxis of tuberculosis. Tuberculosis infection during infancy comes from without and not from within.

As to the frequency of tuberculosis in childhood, Bollinger in 500 autopsies of children of all ages found lesions of tuberculosis in 218 cases.

As to age, tuberculosis develops most frequently in children at about one year. The maximum death rate is reached between second and fourth years. As to method of infection, undoubtedly many children are made tuberculous by an infected milk supply. But a large percentage contract the disease by inhalation, as autopsies show that the bronchial glands harbour the oldest foci. Tuberculosis of the intestinal tract in children is often secondary to the pulmonary disease, as children, when quite young, do not expectorate.

Sputum from a tuberculous mother, father, relative or friend is a very frequent source of infection of little infants, by the act of kissing. A midwife in the village of Newberg infected ten children, in a short time, by sucking the mucus from the mouth of the new-born, and blowing into the mouths of the asphyxiated. Inoculation of the infant is rare except through the rite of circumcision.

After a child is old enough to creep it is still more exposed to all three methods of infection. It may inhale the bacilli laden dust of the air near the floor. It is continually putting things in its mouth, and may ingest the bacilli in this manner. It may inoculate itself by scratching, after gathering bacilli on its finger nails. This may

happen especially to children with eczema or other skin trouble. Lupus is started by the child putting its fingers in its nose or picking its nose.

How may we counteract or avoid these dangers to which children are exposed from the ever-present tubercle bacilli? Boards of health should issue pamphlets containing in plain language directions regarding the prophylaxis of tuberculosis. These instructions should be placed in the hands of every mother, nurse, kindergartner and teacher in the country.

The tuberculous mother should not nurse her child, nor should she sleep with it. All tuberculous people around children should be rigidly careful of the disposal of sputa, and of the "drop ejecta" during coughing and sneezing.

A child should never be kissed on the mouth. Consumptives should not kiss at all.

The orthodox rite of circumcision should be done only by one shown by careful examination to be free from contagious diseases.

The sale of tuberculous milk should be made impossible by necessary sanitary laws.

The floor of the rooms in which a child lives, and on which it plays should not be carpeted. It should be kept scrupulously clean. The ordinary broom should never be used in cleaning the children's rooms; if wiping the floor is not practicable it should be swept with moist sawdust.

The visits of children to menageries, and especially to the cages of monkeys and apes, is a source of danger. Monkeys and apes are especially liable to tuberculosis. All animals should be frequently examined and tuberculous animals destroyed. No man with tuberculosis should be allowed to remain as keeper.

Thorough hygiene should be enforced in kindergartens and schools, and carefully taught in every school. Lady teachers and grown-up girl pupils should not, under penalty of dismissal, be allowed to wear trailing skirts.

The proper use of cuspidors, spit-flasks and handkerchiefs should be enforced in every school room.

Obligatory periodical disinfection of every school room should be instituted.

Under a second head he discusses prophylaxis of predisposition.

What is predisposition? As clinicians we answer, a physiological poverty whereby the system is minus phagocytic and bactericidal powers. As bacteriologists we would say, a predisposition is that peculiar condition whereby the various organs offer a favourable soil for the development of bacilli.

Inherited predisposition is avoided as far as possible by careful hygienic, dietetic, athletic, hydro-therapeutic, aero-therapeutic and medicinal measures directed to the upbuilding of the tuberculous or predisposed parents. Especially should the pregnant mother be careful as to dress, food and general hygiene.

Tuberculous people should avoid having children.

All measures calculated to strengthen and upbuild should be instituted for the predisposed children. Hygienic clothing, good food, pure air and plenty of sunshine. Plenty of parks and playgrounds in the cities are of importance. The use of alcohol predisposes to tuberculosis. The mouth should not be neglected. Teeth should be kept clean and cavities promptly filled. Enlarged tonsils should be removed.

BASHAM'S MIXTURE.

An old time-tried tonic in urinary affections, particularly in degenerative conditions of the kidneys, is "Basham's Mixture." The virtues of this preparation were extolled in lecture rooms quite half a century ago, and the same is said to-day. In its particular field of usefulness it has well stood the test of time. Its composition is:

℞ Tr. ferri chlor.....f. ʒiij
 Acid. acet. dil.....f. ʒiiss
 Syr. sim.....f. ʒss
 Liq. ammon. acetat., q. s. ad.....f. ʒiv

M. Sig. One dessertspoonful every two hours—

Clinical Review.

A PASTE THAT WILL ADHERE TO ANYTHING.

Prof. Alex. Winchell is credited with the invention of a cement that will stick to anything. Take two ounces of clear gum arabic, one and one-half ounces of fine starch, and one-half ounce of white sugar. Pulverize the gum arabic, dissolve it in as much water as the laundress would use for the quantity of starch indicated. Dissolve the starch and sugar in the gum solution. Then cook the mixture in a vessel suspended in boiling water until the starch becomes clear. The cement should be as thick as tar, and kept so. It can be kept from spoiling by dropping in a lump of gum camphor, or a little oil of cloves or sassafras. This cement is very strong indeed, and will stick perfectly to glazed surfaces, and is good to repair broken rocks, minerals, or fossils. The addition of a small amount of sulphate of aluminum will increase the effectiveness of the paste, besides helping to prevent decomposition.—*Amer. Jour. of Surgery and Gynaecology.*

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

ADRENALIN.

Dr. Winfield Ayres, of Bellevue Hospital, New York, has found a mild solution of adrenalin extremely useful in certain kinds of genito-urinary work. In examining the urethra an irritable stricture is frequently discovered; the first evidence of the fact being generally a severe hæmorrhage, which there is sometimes difficulty in stopping. It occurred to Dr. Ayres to use adrenalin, and he finds it answers the purpose well, a solution of 1 to 100,000 being sufficient for the purpose.

ACROSTIC ON FRACTURES AND DISLOCATIONS.

S. C. Mish gives the following as an aid to the memory:

FRACTURES.

False points of movements.
Rotary displacement.
Angular deviation from normal angle.
Crepitus.
Tenderness on point of pressure.
Unnatural mobility.
Retraction of limb by muscular contraction.
Ecchymosis.
Shortening, swelling, pain.

DISLOCATION.

Disturbance in function of joint.
Immobility.
Swelling.
Loss of natural contour.
Only forced mobility.
Crepitations, no crepitus.
Angular deformity.
Tenderness and pain.
Interference with function.
Old landmarks of joint destroyed.
No shortening in shaft of bone.—*Cal. Med. Jour.*

INDICATIONS FOR OPERATION IN GASTRIC ULCER.

The latest surgical thought as regards the operative treatment of gastric ulcer is well expressed in the article in question. It has been the custom to so postpone surgical procedure on stomach ulcers that when finally the surgeon was called in the patient's condition was desperate and operation availed but little. Since, however, the inefficiency of drugs is now so evident and surgical technique so improved, the surgeon can operate on gastric ulcers confident that, if called in time, he can alleviate if not cure the disorder.

There are several operations which are in use in different phases of this disease, viz.:

1. Gastronomy, including the excision of ulcers.
2. Gastroplication, or turning in of the stomach wall, to close an ulcer that has perforated, or to strengthen the wall at a point where perforation is threatened.
3. Pylorectomy for the removal of an ulcerating pylorus.
4. Pyloroplasty for the widening of a pylorus contracted by ulceration.
5. Gastro-enterostomy to provide a short cut into the intestine from a stomach whose motility is interfered with by ulceration.

Gastro-enterostomy is decidedly useful in relieving pyloric spasm, decreasing the production of hydrochloric acid, checking gastric hemorrhage and promoting the healing of ulcers.

When such cases come under the surgeon's care he must know the indications for operation and the relative value of the various procedures. Immediate operation is demanded where symptoms of perforation appear. In these cases operation in the first twelve hours gives twice as many recoveries as those performed twenty-four or forty-eight hours after perforation. Hemorrhage, alarming or persistent, also demands operation. After perforation recovery without operation is impossible, while some hemorrhages will yield to medical treatment. So the surgeon must balance the probabilities of recovery in these cases. Roughly speaking, hemorrhages in gastric ulcers may be divided into two classes, viz.: those that occur in the first thirty years of life and those occurring after that time. A study of various hospital reports, notably Guy's Hospital and the Massachusetts General, shows that in the first period the hemorrhages are due to the small round ulcer,

and seldom fatal. In later life hemorrhages are generally the result of chronic ulcers, which open the large vessels under the serous coat, or may even perforate adjacent organs, adhesions being present. These, therefore, are more dangerous, and slight recurring hemorrhages from a patient over thirty should be accounted serious, and operation should be considered. Gastro-enterostomy usually, but not always, relieves the hemorrhage, perhaps by giving rest and free drainage to the stomach. It stops the anaemia consequent upon continued bleeding, and so favours the healing of the ulcer.

Surgery, apart from its application to hemorrhage and perforation (the complications of gastric ulcer), is also applicable to the treatment of the ulcer itself. It is well to compare the mortality of gastric ulcer with the mortality of the operations for its relief. As in all statistical reports, it is hard to make a fair average of the mortality rate on account of the difficulty of tracing patients to the end. However, it would seem that the average mortality for all operative interference in this disease is about 16.1 per cent., whereas the mortality of the disease itself is from 25 to 30 per cent. This is not absolutely conclusive, for recurrence may take place after the operation, though how frequently is unknown. Gastro-enterostomy to-day has a mortality of 10 per cent., and Mr. Mayo Robson has practically reduced his mortality to 5 per cent. Balancing these facts, it would appear that after a chronic ulcer has long resisted medical treatment, and the patient is daily losing strength and hope, then it is proper to have recourse to surgery. To resume, it would seem that these are the chief indications for surgical treatment in relation to gastric ulcer, viz.:

1. Acute hemorrhage should rarely be treated by operation. The results of interference have not been good, while the results of medical treatment have been satisfactory. When, however, a hemorrhage frequently repeats itself, even though not severe in amount, it will demand operative treatment as soon as its recurrent character is plain.

2. Small frequent hemorrhages, threatening anemia, give a clear indication for operation.

3. Perforation of the stomach, either acute with general peritonitis, or chronic with surrounding adhesions and perigastritis, demands instant operation.

4. When an ulcer runs a chronic course with a strong tendency to recurrence, and gradually diminishes the

patient's capacity for work and the enjoyment of life, an operation is indicated, especially when the patient is so situated as to be dependent on his daily work for support, and unable to closely regulate his diet.—A. P. Chabot, M.D. Transactions, Mass. Med. Soc.

QUICK CONTROL OF NOSEBLEED.

J. H. Herring (*St. Louis Med. Review*) says that by placing the index finger upon the lateral cartilage immediately below its juncture with the nasal bone, and making steady, firm pressure upward, inward and backward, ninety per cent. of all cases of epistaxis may be effectually controlled in three minutes. The blood vessel from which the bleeding takes place, in the vast majority of cases, is located in the anterior nasal chamber in the mucous membrane lining the nasal septum.

SUPRAPUBIC OPERATION FOR VARICOCELE.

A. E. Bradley, in the *Journal of the Association of Military Surgeons* for August, 1901, says that so far as he is aware incision of the scrotal wall has been the only method of operating upon the scrotal contents. The suprapubic method, while new, possesses unquestioned advantages over incision of the scrotum. The operation begins with the usual method of sterilizing the skin, which is then incised for a distance of two and one-half inches parallel with Poupart's ligament. The underlying fascia is grasped by forceps, and with a blunt dissector torn through until the external abdominal ring is exposed. When the cord is exposed the fascia is divided longitudinally, thus bringing the spermatic vein into view. Slight traction upon the veins serves to pull them upward, emptying the scrotum of the enlarged and tortuous vessels. A ligature is then placed on the upper and lower portions of the vein, the portion included between the two being removed. The uncut ends of the ligatures are now tied, thus drawing together the severed ends of the veins for the support of the testicle. The wound is then closed in the usual manner. A scrotal supporter is used for some time after the operation.

It is claimed for this high operation that it secures perfect asepsis, owing to the locality of the wound, and a support for the testicle is assured that would otherwise be wanting, and without which atrophy might result. The operation is practically devoid of mortality, and is one of the most successful of surgical procedures.

THE CANADA MEDICAL RECORD

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Editorial.

TYPHUS FEVER.

Since the year 1847, when Montreal was visited by a severe epidemic of typhus fever, but few cases of the disease have been seen in this city. As this outbreak occurred among emigrants arriving from Ireland it was known as ship fever. Emigrants in those days came out in small sailing vessels to Quebec, the voyage occupying from six to seven weeks, and there was much overcrowding. Moreover, in that year there was an almost total failure of the potato crop in Ireland, so that those leaving that island were in a condition to favour the development of the disease. Forty years ago typhus was always present in a more or less degree in all the large cities of Great Britain, but particularly in Ireland. It has since then been gradually disappearing, and this disappearance is one of the great triumphs of modern medicine. So far as we can learn and know from personal observation, not over fifteen cases have appeared in Montreal since the great epidemic of 1847. One occurred in 1868 in the practice of the writer, clearly traceable to the opening of a typhus coffin of a victim of

the '47 scourge, proving the truth of the observation by Osler that the poison "retains its activity for a remarkably long time." In 1877 a local outbreak occurred in the House of Refuge in this city, when eleven inmates were attacked. No positive source of infection could be traced, but at night the overcrowding was so great that there was only about 88 cubic feet of space to each person. Five or six years ago two cases were discovered and removed to the Civic Hospital, and recovered. Early in April of this year two cases were admitted into the Montreal General Hospital where they were completely isolated, and both recovered. We were asked to see these cases, and there was no question as to the disease being typhus. So far as we can ascertain the source of infection in all these cases could only be traced in the case which occurred in the practice of the writer. The others, we believe, were due largely, if not entirely, to filth and overcrowding. Typhus has not yet been embraced in the microbic theory, so that its cause remains to-day what it was fifty years ago. Then it developed wherever unsanitary conditions prevailed. Its practical disappearance in Great Britain has been entirely due to improved sanitation, and on this line lies the safeguard against its appearance in the cities of Canada.

Book Reviews.

The Practical Medicine Series of Year-Books comprising ten volumes on the year's progress in Medicine and Surgery issued monthly, under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School, volume III., the Eye, Ear, Nose and Throat, edited by Casey A. Wood, C.M., M.D., Albert H. Andrews, M.D., T. Melville Hardie, A.M., M.D., December, 1901. Chicago. The Year Book publishers, 40 Dearborn street.

The idea of publishing a medical year-book in parts is a very good one, for we thus get a series of volumes of convenient size instead of one huge book which it is a labour to handle.

Then, too, we receive our information in moderate doses and at stated intervals which permits of better assimilation.

The volume under consideration gives a succinct account of all that has been published in the past year that is of special interest to those engaged in the practice of ophthalmology, otology, laryngology and rhinology, and is a welcome addition to the library of the general practitioner as well

G. W. M.

Manual of Childbed Nursing with Notes on Infant Feeding, by Charles Jewett, A.M., M.D., Sc.D., Professor of Obstetrics and Diseases of Women in the Long Island College Hospital. Fifth Edition. E. B. Treat & Co., 241 and 243 West 23rd street, New York, 1902.

This short and up-to-date Manual, as the preface to the 5th edition states, was originally prepared for the Training School for nurses at the Long Island College Hospital. In spite of the modesty of the writer, the number of editions show it proved of such value that it has now been revised and enlarged, and, we have no doubt, will prove of the very greatest service to both nurses and the well educated woman of the day who is about to become a mother. It is short, about 80 pages; every word is explained, either at once or in the glossary at the end. The nurse and patient who follow the rules and regulations, not only for themselves, but also as regards the child, cannot fail to benefit proportionately and we can heartily advise every nurse and prospective mother to possess a copy.

H. L. R.

The Practical Medical Series of Year Books, comprising ten volumes on the year's progress in Medicine and Surgery, issued monthly under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago; Post Graduate Medical School. Volume IV. Gynaecology, edited by Emilius C. Dudley, A.M., M.D., Professor of Gynaecology, Northwestern University Medical School, Gynaecologist to the St. Luke's and Wesley Hospitals, Chicago, with the collaboration of William Healy. Chicago. The Year Book publishers, 40 Dearborn street.

The object of this book is to give a summary of the most noteworthy contributions to gynaecology made during the past year and a half. This has accomplished as far as a two hundred page book will permit, and it is remarkable how many articles have been included. The editor says that recent literature shows definite progress in the following subjects:—1st. The application of scientific gynaecology to sociologic problems. 2nd. The differentiation of pelvic infections with reference to etiology, symptomatology, diagnosis, prognosis and treatment. 3rd. The critical study of statistics especially as they relate to infections, neoplasms and

displacements. 4th. Careful balancing of the relative indications for gynaecologic operations. He also finds that much less attention is being paid to plastic work, which formerly held the first place in gynaecology, and a very great deal more to abdominal surgery. Of this the reader can judge for himself. His text is made still more interesting by the introduction of a large number of illustrations. There is also an exceedingly well arranged index, enabling us to find the opinions of leading writers on the various subjects.

A.L.S.

Essai de Semiologie Urinaire. Méthode d'interprétation de l'analyse urologique. L'urine dans les divers états morbides, par Camille Vieillard, Pharmacien-Chimiste, Lauréat du Concours Brassac, Membre de la Société Chimique de Paris, Elève de l'Institut Pasteur (1898). Préface par Albert Robin, de l'Académie de Médecine. Paris, Société d'Éditions Scientifiques, 4 Rue Antoine Dubois, 1902.

The author points out that a thorough knowledge of the urine is becoming every year more important, and at the same time so easily obtained that the practitioner is no longer satisfied with knowing the density, quantity of urea, uric acid, chlorides, phosphoric acid and the presence of albumen and sugar. The difficulty now is to master the interpretation of the analysis. So far the books have been chemical rather than clinical. What we want to know is the significance of a few more grains or less of urea; that the amount of it represents the quantity of albumenoids which have accomplished the complete cycle of vital changes and their maximum of utilization; that the relation of sulphur incompletely oxidized to the total amount of sulphuric acid, is an indication of the activity of the liver. It increases or diminishes with hepatic efficiency or deficiency. The symptoms derivable from the urine are so important that the diagnosis in many cases can only be made after the urine has been scientifically analyzed. Those who can read French will derive a vast amount of information which we have not hitherto seen in any text book.

A.L.S.

Dr. T. Buret, Secrétaire Général de la Société de Médecine de Paris. Traitement des maladies contagieuses de l'appareil générateur, Guide Pratique. Bases fondamentales du traitement, examen critique des formules les plus usuelles; injection massive de sels hydrogéniques insolubles, simplifiés, et rendue pratique; manuel opératoire très détaillé de ces injections; grands lavages au permanganate de potasse; nombreuses observations et anecdotes médicales. Paris, Société d'Éditions Scientifiques, 4 Rue Antoine Dubois, 1902.

Paris being probably the centre of the universe, as far as the treatment of syphilis is concerned, this work, which is fully up-to-date, contains many valuable points in the management of venereal and syphilitic diseases. The chapter on gonorrhoea and syphilis

in women is very well written, and is especially interesting. We may safely say that this work is a very complete treatise on syphilis and venereal diseases as we understand them to-day, and being written in elegant French, furnishes enjoyable reading to those who even partly understand the language, A.L.S.

Studies in Psychology of Sex. Sexual inversion, by Havelock Ellis. Philadelphia, F. A. Davis Company, 1901.

This work was originally issued in England about four years ago. It was, I believe, favourably received by the Medical Press, and its circulation was confined to the scientific and medical world. The London police, however, instituted a prosecution against a bookseller, who sold the book, and the Recorder of London, sitting as Judge, decided that it was not a scientific work, and ordered it to be destroyed. It is now republished in the United States and its author has decided that the various volumes required to complete the series, shall be issued from this side of the Atlantic. I have read the major part of the work, and believe that the entire subject has been treated from a thoroughly scientific stand point. There is, I know, some who, never having met with a case of sexual inversion, will not admit its existence. It exists, nevertheless, and possibly more frequently than is imagined. I have, during an experience of nearly forty years, met with several cases. One does not, as a rule, publish them and those recorded previous to the issue of this volume, were in connection with asylum or prison reports. In the preface to the first edition of this book, the author says: "very few indeed, would not be surprised if it was possible to publish a list of the names of sexual inverted men and women, who at the present time are honourably known in church, state, society, art or letters. This is a startling statement, but I believe it is true. I have known of sexual inversion more than once in persons occupying prominent positions. The outcome of such a book would, of course, be shorn of much of its value, did not all the startling facts it contains form a basis upon which to found a rational method of treatment. The author has made this effort, and although it is as yet in the purely theoretical stage, nevertheless it suggests much food for thought in this direction.

F. W. C.

Transactions of the College of Physicians of Philadelphia. Third series. Volume twenty-third, Philadelphia. Printed for the College, 1891. Edited by William Zentmayer.

Although the title page bears the imprint 1891, it has only just been published. This will be understood when I mention the fact that it contains all the contributions read before the Society, from January to December, 1891 inclusive. The initial paper is written by the late Dr. DaCosta, and is a short but pleasant *résumé* of the life of Sir William Paget. Then follows a memoir

of Dr. William Pepper, from the pen of Dr. Tyson. Dr. Pepper had many friends in the larger cities of Canada. To them, if they can get this volume, it will recall one who was their friend and who during his life did much for the profession of medicine. An analysis of the character of Dr. Physick, by Dr. George McClellan, is the next paper. Dr. Physick, after studying at the University of Philadelphia, from which, it is stated, he did not wish to graduate, went to London and took, in 1791, the diploma of the R.C.P. and S. He visited Edinburgh the following year and received the degree of M.D. from its University. While in London he became associated with John Hunter, and in the Hunterian Museum, are to-day, some valuable preparations, the handwork of Dr. Physick, made under the direction of Hunter. During this tour he was an interne at the St. George's Hospital. He returned to Philadelphia in 1793 and from that till 1796 did not earn enough money from his profession "to pay for the soles of his shoes." Subsequently he became identified with surgery in the University of Pennsylvania, and afterward with Anatomy, from which he retired in 1827 from failing health. The date of his death is not given. This sketch is accompanied with a portrait in steel of Dr. Physick and contains much of interest regarding the early teaching of medicine in Philadelphia. The rest of the volume consists of professional papers, all valuable and interesting.

F. W. C.

The International Medical Annual. A year book of treatment and Practitioner's Index, 1902. Twentieth year. E. B. Treat & Co., 2141-2143 West 23rd Street, New York. Price \$3.00.

Within the pages of this Annual are contained and easily found, a very excellent *resumé* of the Medical and Surgical literature of the past year. The bulk of the contributions are from the pen of well-known British physicians and surgeons. Those from American authors are equally as valuable as those contributed by their English confreres. The bulk of the volume is increasing—in fact is nearly double in pages—to that in the first years of its publication. This is due to the increased demand of its subscribers for more detailed information, especially in the surgical department. It is published in a convenient size, and any physician or surgeon who purchases it, will soon find that its value is far beyond its cost.

F. W. C.

Genito-Urinary Diseases and Syphilis, for Students and Practitioners. By Henry H. Morton, M.D., Clinical Professor of Genito-Urinary Diseases in the Long Island College Hospital; Genito-Urinary Surgeon to the Long Island College and Kings County Hospitals and the Polhemus Memorial Clinic, etc. Illustrated with half-tones, and full page

colour plates. Pages xii-372. Size $9\frac{1}{2} \times 7$ inches. Price, extra cloth \$3.00 net, delivered. Philadelphia, F. A. Davis Company, publishers, 1914-16 Cherry Street.

In reviewing this work, it is at once apparent that the author is very much at home with the practical clinical aspect of the subject, for the text abounds with most apt and useful descriptions of clinical methods and technique, which in so many works is unfortunately omitted to give room for some transient theory, or obsolete method. The illustrations are good and the arrangement and division of each subject is excellent. In reviewing the treatment, it is refreshing to note the concise yet minute directions for the adoption and execution of any line of treatment and the various reasons for selecting the same. Some very novel and instructive diagrams are introduced to explain the treatment of chronic urethritis by the use of the endoscope. They cannot fail to aid the beginner in this puzzling work.

We are pleased to recommend this work as a most useful one to practitioners and students alike. It is clear, up-to-date and not too exhaustive.

G. F.

Syphilis, A Symposium.—A small volume, published by E. B. Treat & Co., New York, is made up with contributions by seventeen recognized authorities. Price, \$1.00.

Many of these contributions are well worthy of careful perusal. While syphilis is undoubtedly a subject which has always received most exhaustive attention in literature, yet it is a disease of such varying characteristics that the more unusual forms as noted by specialists are always interesting and instructive. The chapter on "Unrecognized Syphilis in General Practice," by L. Duncan Buckley, is worthy of all attention. There is illustrated most clearly the great danger to the innocent occasioned by persons who are suffering from unrecognized syphilis, and one, therefore, ignorant of the necessary precaution to prevent contagion. That syphilis is not necessarily a venereal disease is to-day most generally accepted and this fact has contributed largely towards the efforts to prevent its spread.

In the last few pages are given the answers to numerous pertinent questions on syphilis by the various syphilographers. They are well worthy of careful consideration.

G. F.

CANADA MEDICAL RECORD

JUNE, 1902.

Original Communications.

A HALF CENTURY OF PRACTICE.

On the 7th of May the Medical Profession of Montreal honoured three of its members, who had completed fifty years of active practice, by a Dinner at the Place Viger Hotel. These gentlemen were Dr. J. P. Rottot, Dean of the Faculty of Medicine, in Montreal, of Laval University, Dr. D. C. McCallum, Emeritus Professor of Obstetrics in McGill University, and Sir William H. Hingston, Professor of Clinical Surgery in the Medical Faculty (Montreal) of Laval University. One hundred and fifty sat down to the best dinner the celebrated Place Viger could produce. The tables were beautifully decorated with flowers, plants, etc. The Chair was occupied by Dr. Francis W. Campbell, the Dean of the Medical Faculty of Bishop's University, and he was supported on either side by the guests of the evening. The *menu* card was made an appropriate memento of the occasion, the front of the card having the photos of the three gentlemen in whose honour the dinner was given. A fine orchestra discoursed beautiful music during the entire evening, and Mr. Labelle, a magnificent tenor engaged for the occasion, sang several solos. After dinner the chairman proposed "The King," which was enthusiastically received, and the national anthem was sung. The chairman then rose and proposed the toast of the evening. He said:

"GENTLEMEN,—In proposing the health of 'Our Guests' permit me to express my personal gratification at being

present upon an occasion which will ever be memorable in the medical history of our city. This gratification is, I am sure, felt by every one who now surrounds this festive board. An event like the present does not often occur, for the opportunity is somewhat rare. So far as my memory serves me, only twice in this city within a period of fifty years have similar banquets been held, the recipients being the late Dr. George W. Campbell and the late Dr. D'Orsonnens. Our profession does not seem to tend toward longevity, and green old age is somewhat rare. But to-night, gentlemen, we have met to do honour to three of our *confrères*, Dr. Rottot, Dr. McCallum and Sir William Hingston, who, in the Providence of God, have been permitted to see this green old age—have been permitted to see the turning point of fifty years of active medical work. What is even still more to be thankful for is the fact that their hands are still on the plough, the furrows are still well made. The hands that direct seem to-day as steady as when, in the first gush of youthful enthusiasm, they won their first innings in the race for professional position. Long, I say, may this green old age continue.

“Gentlemen, our guests have contributed much to the medical history of Montreal. Each has done his part to make this city the centre for medical education in the Dominion. Dr. Rottot graduated in 1847 from the Montreal School of Medicine, which after a time became the medical department of Victoria College, and now is a branch of Laval University. He, early in his career, became a teacher in this Faculty, and for years has been its Dean. Dr. McCallum graduated from McGill in 1850, and in a few years, after serving an apprenticeship in several minor chairs, took charge of the important chair of obstetrics, which he held for many years. Sir William Hingston took his degree from McGill in 1851. His career as a medical man—of late years in the surgical line and as professor of clinical surgery in Laval—is well known. Unlike his brother guests, who have held strictly to professional work, Sir William Hingston entered the arena of public life. Many of us can remember when he occupied

the position of Mayor of this city, and the sanitation he then commenced. To-day he is a grave and reverent 'Senator,' doing good work, let us hope, by arresting, as occasion demands, the impulsive and sometimes ill-matured work of the democratic 'Commons.'

"Gentlemen, I have occupied perhaps too much time in introducing this toast. If so, forgive me; for out of the fullness of the heart the mouth speaketh. I have known our guests during all my professional life—my term is only a few years beyond theirs; and I close by saying the city of Montreal is proud of our guests, the medical profession of Montreal is proud of our guests. Long may they be spared to us. I give you Dr. Rottot, Dr. McCallum and Sir William Hingston—Our Guests."

Dr. E. P. Lachapelle then rose and spoke in French as follows:—"It is with pleasure, gentlemen, that I rise on behalf of my French-speaking brethren, to add a few words only to the health which has just been so eloquently proposed by the worthy president of the banquet.

"The occasion which has brought us together this evening is not one which happens every day. We entertain to-day the three oldest doctors in active practice; we celebrate their medical golden wedding. And in order to give to this feast the character which it deserves and to make it in every way worthy of those whom we wish to honour, we have called together to the one banquet the representatives of the various nationalities who, in Montreal, divide the field of professional work."

"We forget our rivalries of every day in order for a moment to join together in making this unique offering of sympathy and admiration.

"Our rivalries! Is that the proper word to use? Are we not all fellow-workers in the same work, directing our efforts day by day towards the same end? And do we any the less practice the same profession because we speak a different language? Is our profession for that reason any the less enlightened or the less humane?"

"Let me tell you, gentlemen, that I, for one, do not think so. Indeed, the occasion which brings us together to-night is one that does not occur often enough, for it serves to show better than words that we are not actuated by a spirit of rivalry, but rather by emulation, and that we are brothers who, in spite of all that may be said, belong to one family—the family of medical men. Is it not, moreover, this brotherly spirit which makes every one of us so happy to-night in joining together to do honour to our distinguished guests, Doctors Rottot and McCallum and Doctor Sir William Hingston? The lives themselves of our honourable brothers, are they not beautiful examples of brotherly love? Have they not, side by side for fifty years and more, exercised their art with the same assiduity and the same devotion, all three of them consecrating their talents and their strength to the same purpose; to teach the principles of an art, to relieve suffering, to heal disease and to help the poor. And think you that when they thus contributed all that was best in them, of both heart and health, they were acting as Canadians, Englishmen or Irishmen?

"No! gentlemen, they acted so because they were men of learning, because they were charitable, indeed, because they are medical men. It is for this reason that we are so proud of them; this is why we honour them to-night, this is why they will always remain for us—models to imitate and masters in whose footsteps we must follow.

"Is it not that which has filled their lives with which we should fill our own? The mission which they laid out for themselves, and which they have so well fulfilled and the duties of which they are still performing—should we not endeavour to accomplish in our turn, each in the feeble measure of his capacity, if we wish to attain to the full height of our vocation? What better or more recent proof could be given to all of the identity of our lives, or to the unitedness of the medical family.

"Yes! gentlemen, the reason for coming together is a beautiful one. Members of the same family and fellow labourers in the same field, we have for a moment laid ou

work aside and, moved by the same spirit of sympathy and admiration, come to salute our leaders and elder brethren in the profession, and to proclaim what all the world already knows, that they have deserved well of our profession and of our country.

"We raise our glasses with emotion, for we are honouring fifty years of study, of hard work and devotion to duty, when we drink to the health of Doctors Rottot, McCallum and Sir William Hingston. Yes! let us drink to their health, that for many long years to come they may remain among us the personification of professional success obtained by their application to duty, perseverance in devotion and integrity of character.

"Rise! gentlemen, and drink the health of our honoured guests."

The toast was received with great enthusiasm.

Dr. Rottot was first called upon to reply, which he did in the following terms:

"Mr. Chairman and Gentlemen:—

"With my thanks deign to accept also my most hearty congratulations for the complete success of this magnificent banquet to which you have summoned the three oldest physicians of Montreal, in order to do them honour and to reward them for, in the words of a dear Jesuit friend, having triumphed over death for more than seventy years. It is both discreet and prudent for me not to give the exact age of my comrades, as they might not be pleased if I did. We doctors so seldom triumph over our old enemy, Death, that we may feel tempted to accept these congratulations and to glorify ourselves for having so long succeeded in escaping death. But no! Let us rather bow down before the only Giver of all good and thank Him for the victory which is His alone and Who alone can make it last.

"This is, indeed, a rare sight—to see the professors and graduates of three different Universities assembled together on the same day and around the same table, in order to celebrate the golden wedding of three of their brethren,—a unique celebration in the history of our country. The twentieth century had reserved for us this surprise and this re-

joining. But, if the habit of diagnosing has given me any certainty, I feel sure, after casting my eyes about me, that I am not mistaken in predicting that there will be many others to imitate us.

“We appreciate very highly the delicacy of your proceedings and your efforts to procure for us a moment of happiness ; you wished to make us forget the worries and cares of life ; have you attained your object ? You would have attained it perfectly, I might say, you would have succeeded in bestowing upon us more than the mere illusion of happiness ; yes, you would have rendered us perfectly happy if, by a good nature beyond measure, you had undertaken to prepare for us the speeches that we were to make to-night. In this, however, I am only speaking for myself ; for what would have been kindness to me would have been cruelty to others, to deprive them of the pleasure of charming us by their eloquence. But, though I would have preferred to have spoken through you and would have heartily thanked you, still, since you wish it, I will sacrifice myself and conform to the established practice. I had, for the occasion, prepared two pieces of eloquence : one very long and the other very short ; in the first I would have interested you in giving an account of the changes and the progress of medical science which have taken place in Montreal during fifty years ; in describing the modest beginning of our first medical school, its struggles and the obstacles which it had to vanquish before it became the Faculty of Medicine of Laval University ; or in describing the student life of those days, so different from that of the present time. But at a banquet of this kind should we not have a pleasant time ? My long and accurate discourse would have tired you, if it did not, indeed, send you to sleep ; so I suppressed it. As for the other and shorter one, I suppressed it too, and I am glad to see what pleasure this announcement seems to give you. You feel relieved to hear that those two speeches have been suppressed, but believe me, you are not more relieved than I am.

“Now, Doctors Hingston and McCallum must allow me to speak to them freely, and you, gentlemen, allow me to detach myself for the moment from my venerable brothers, so that I may speak to them as though I were one of you. I also wish to express to them my esteem and sympathy. Besides, if I accepted your invitation it was with this object in view: I did not wish to share with these gentlemen, in silence, the praises which they deserve for so many reasons; for their labours, their science, their so varied and numerous successes, as well as for their venerable age. I feel that I am too young to be placed on an equal footing with them.

“In saying this I am only proclaiming a truth which is evident to the eyes of all—you have only to glance even discreetly at us three to see that the hair of my friends is as white as snow and that there is very little of that. Compare those two with the third! It is all very well for Sir William to say that he is the youngest and that he can prove it by his certificate of baptism; but he will not tell you that he was three years old when he was baptised.

“Since I have suppressed my speeches I will replace them by an enigma like in the time of Esop, with this difference, however, that Esop, in making his enigma, had an object in view which I have not—he wished for fame and glory. His great reputation, as you know, is due to the fact that no one could explain his enigmas, which proved that he was more clever than any of his contemporaries. Unfortunately I am not in the presence of his contemporaries, otherwise I might have attempted his experience, but I have to address my own and this makes me more circumspect. This is my enigma: What is at once the most beautiful and the most rare thing on the earth? You see this enigma is very easy. If you cannot solve it at a single glance let me come to your aid; don't let your imagination run wild; you need not even go outside of this room; be satisfied to run your eyes around this table and you will soon discover that of all the things that you have ever seen worthy of your admiration there is nothing more beautiful or at the same time more rare than old age.

Not the old age which appears stooped and decrepit in a body bent towards the earth, with faltering gait, with a dimmed intelligence, but the old age we admire in an active and vigorous frame, with a forehead free from wrinkles; with the strength and vivacity of a mind in full activity;—in short, that beautiful and noble old age which shines with such rare and incomparable brightness in our two Doctors, Sir William Hingston and Dr. McCallum.”

Dr. D. C. McCallum then rose and replied to the toast as follows:—

“Mr. Chairman and Gentlemen.—I thank you sincerely for your kindness in associating me with my friends, Dr. Rottot and Sir William Hingston, in the reception of the great honour which you have conferred upon us by this fine banquet, on the attainment of our Jubilee year in the practice of medicine. For the cordial manner in which you have responded to the toast to my health, I return you my heartfelt thanks.

“Fifty years is a long time to look forward to, but how short it appears when we take a retrospective view of the same period of time. At the beginning how slowly the years pass and we then look hopefully forward to being able to make good use of our opportunities and to accomplish much important work in the world. The backward look, however, reveals to us that although we have personally done but little to advance our own interests or those of our fellow-men the world moves on, and that during the progress of the fifty years great and important changes have taken place in our country and in the profession to which we belong.

“What was the condition of Canada in the year 1850? and how does it compare with the condition of the country fifty years after?

“In 1850 it consisted of two provinces, Upper and Lower Canada, with an area of about 550,000 square miles; having a single Parliament, migrating at stated periods from one province to the other; with separate and often conflicting provincial interests, becoming rapidly more acute and threatening seriously the peace and prosperity of the country.

— “In 1900 instead of two provinces it was, by the Act of Confederation passed in the year 1867, made to include the provinces of Ontario, Quebec, Nova Scotia and New Brunswick. To which were subsequently added Manitoba in the year 1870, British Columbia in 1871, Prince Edward Island in 1873; and in 1880 all British possessions on the North American Continent (excepting Newfoundland) were annexed to Canada by Imperial order in Council. So that Canada now extends from the Atlantic to the Pacific Ocean, 3,500 miles from East to West and 1,400 miles from North to South, and embraces an area of nearly 4,000,000 square miles.

“In place of one migrating Parliament, as in 1850, Confederated Canada has now an established Federal system of government consisting of a central or Federal Parliament which is invested with the authority to originate all measures and to establish all regulations and laws for the development, stability and interests generally of the Dominion; and each separate province has its own legislature to which is confided the management of its own local affairs, thus minimizing, if not entirely removing, the danger arising from a clashing of provincial interests. If any province considers that it has a grievance it can invoke the British America Act and lay the grievance before the Federal Parliament or carry it to the Privy Council of England.

“In 1850 trade relations between the two provinces and between Canada and foreign countries were very limited. In addition to coasting craft only a few sea-going sailing vessels visited Canadian ports during the summer months. In 1900 sea-going shipping—British, Canadian and foreign—entered and cleared from Dominion ports, numbered 28,546, with a registered tonnage of 22,800,000 tons.

“In the beginning of the half century scarcely any attempt had been made to develop the mineral wealth of the country. Iron and copper were the only metals that attracted attention, and operations for their development were established at Lake Superior, in the Eastern Townships, at St. Maurice and the Moisie. At the end of the

half century the mines of non-metallic and metallic minerals had been developed to such an extent that the value of the minerals extracted in one year amounted to the large sum of \$63,775,000.

"In 1850 communication between widely separated parts of the country was maintained by means of stage coaches and steamboats. There was not a single mile of railway in Upper Canada, and in Lower Canada there was but one short line between Laprairie and St. Johns, Que., and, it is said, the first rails laid were made of wood. Fifty years after there were 196 railways in Canada, their lines intersecting the country in every direction. These railways being furnished with luxurious palace, sleeping and buffet cars, and supplied with every convenience to render travelling easy and enjoyable. Besides these steam railways there were twelve lines operated by electricity.

"In 1850 there were no telegraph nor telephone lines. To-day we can be placed, by means of the telegraph, rapidly in communication with the most distant parts of the Dominion, and we can converse with our neighbours and transact business verbally at a distance of hundreds of miles through the telephone.

"These few instances which might, did time permit, be greatly increased in number, suffice to shew the more than satisfactory progress that our country has made during the last fifty years. This progress has attracted the attention of business men and capitalists the world over, and the future of Canada may be considered as now secure and promises to be even more brilliant and successful than the most devoted and optimistic of her citizens anticipate.

"While we must admit that the respect and approval with which we are now regarded by the mother country and by foreign communities are due, in a great measure, to the energy and wisdom displayed in the development of our material resources, I do not hesitate to say that the main cause of Canada's popularity at the present day and the favour with which Canadians are everywhere regarded, is to be found in the exhibition of Canadian prowess in the war

now being waged between Great Britain and the Boers in South Africa. Man is by nature combative, and few things attract his attention and evoke his enthusiasm more than courageous deeds.

"Our young men who have taken part in this war have by their resourcefulness, endurance and great courage, made for themselves a name that will always occupy an honourable place in the annals of Britain's wars. Paardeburg and Kleinhart's River will not be readily forgotten, and the daring, unflinching advance of the men in the fighting line of Canadians, on Cronje's position, in the former, and the magnificent courage and "no surrender" in the face of great odds, of the men with Bruce Carruthers in the latter, stamp them with the hall mark of heroism. Heroes all of the purest metal. Heroes *sans peur et sans reproche*. All honour, then, to our brave lads who have so nobly done their duty to the Empire, and who have by gallant deeds imparted so brilliant a lustre to the renown of their country.

"The profession of medicine in Canada has advanced during the last fifty years *pari passu* with the profession in Europe and America in the great progress and development that have taken place during that time in the science and art of healing.

"Previously to the year 1847 the profession in this province was imperfectly organized. There were then three examining boards—one for the district of Quebec, a second for the district of Montreal and a third for the district of Three Rivers. An Act was passed by the Parliament of Canada in 1847 incorporating the profession under the name of "the College of Physicians and Surgeons of Lower Canada." All the members of the profession living at that time, French and English, united their efforts to secure that great and desirable measure. The provisions of this Act, wisely conceived and judiciously carried out, have for the last *fifty-five* years regulated the examination of candidates and their admission to the ranks of the profession, and have secured the registration of all persons legally entitled to practice medicine, surgery and midwifery in the province.

"The same Act, revised as occasion demanded, is in force at the present day. The license it issues, however, authorizes the recipient to practice his profession merely within the limits of the Province of Quebec. He cannot pass into another province of the Dominion and there establish himself in practice. He cannot even pass over the line separating Quebec from Ontario and prescribe for a suffering patient without exposing himself to arrest or to the infliction of a fine. This applies equally to the licentiates of different provinces of the Dominion. The license issued in one province does not confer *ad practicandum* rights in another province, nor are such rights recognized in Great Britain. If the licentiate desires to practice in another province than that in which he has already qualified, he is obliged to submit to an examination as to his qualifications.

"An effort is now being made by our esteemed friend, Dr. Roddick, Dean of the Faculty of Medicine of McGill University, which has received the warm approval and support of a large majority of the profession, to have this embarrassing limitation to the work of the medical licentiates of the provinces of the Dominion removed, and to secure for them the right to practise their profession in any part of the Dominion or in any part of the world where the British flag flies.

"The measure he has proposed to secure this inestimable privilege to the profession of Canada is to establish a Dominion Medical Council for the examination of candidates and their admission to the profession, whose diploma or license would entitle the holder to practice in any part of the Dominion, and lead to his recognition and enregistration by the British Medical Council, which enregistration would secure for him the right to practise his profession in any part of the British Empire.

"The Act which he has drawn up and laid before the Federal Parliament, and now awaits its decision before it, can be submitted to the Local Legislature, provides that the existing Provincial Examining Boards shall retain their

integrity, and preserves all the rights and privileges to which they have heretofore been entitled.

"The autonomy of the provinces in the matter of medical education is not to be interfered with.

"If this movement can be conducted to a successful issue it will increase materially the sphere of action and field for practice of the Canadian licentiate; place him in a more commanding and satisfactory position, and open up to him the possibility of obtaining professional appointments in the civil and military services of the Empire.

"Gentlemen,—As a Canadian and as a lover of my country it has afforded me great and unmixed pleasure to see members of the two great races in whose hands rest the destinies of Quebec meeting together on an occasion of this kind in friendly and sociable intercourse.

"It is a striking and soul-comforting evidence of the respect, esteem and good feeling which these races entertain for each other, and which every patriotic Canadian ought, to the best of his ability, to endeavour to perpetuate.

"Let us, gentlemen, cultivate in ourselves and take every favourable opportunity to kindle in others a spirit of patriotism. Canada is a country of which her sons may well be proud. A not-unimportant part of the greatest and most liberal Empire of the world, with self-government secured to her and with no old-world class distinctions among her people, she is at present the freest, happiest and most desirable place on the surface of the globe in which to dwell. And if that government be considered the nearest to perfection which confers the greatest personal freedom on the individual consistent with perfect security to life and property then have we in Canada a government as near perfection as any government in the world."

Sir William Hingston replied as follows :—

"Gentlemen,—I have had many marks of sympathy and kindness from various sources. I had a marked evidence of your kindness a few years ago, when Her Gracious Majesty honoured the members of the Medical Profession in Canada

in my humble person—and when you noticed the circumstance by a banquet.

“You were good enough, on that occasion, to endorse as it were, Her Majesty’s action; not that it required endorsement, for the Queen can do no wrong, as Blackstone puts it; still it was to me a matter of great gratification to hear from the lips of your distinguished Chairman on that occasion, and from the lips of many around the festive board, so many tokens of good will.

“This evening it is somewhat different. My colleagues and myself are feted and toasted;—and what for? Because we have not seen fit to allow ourselves to be buried or cremated within fifty years of our graduation in medicine.

“And here I should wish to disabuse your minds of the possible thought that fifty years in medicine are, with the addition of the minimum of to-day—the necessary 21 indicates a certain age. My colleagues graduated in the forties;—way back in the forties—I somewhere in the fifties. You see what possibilities that circumstance opens to our contemplation. Then there is another circumstance to which I wish to direct your attention: My Alma Mater was modelled, in part, on the Universities of Edinburgh and Dublin and Glasgow. Now, in the first of these, it is related by Graham, in “Social Life in Scotland,” in the 18th century, that it was not unusual for bright youths—bright youths, mind you—to enter the University at a very tender age and to graduate long before the age demanded in this country. He mentions the name of Colin McLaurin, who afterwards became the celebrated mathematician, famous throughout the world. He entered at *eleven* and graduated at fifteen. The same is said of Hume and Robertson and Hill, afterwards Principal of the University. Now, if these bright youths could enter the University under the shadow of Arthur’s Seat, and graduate at so tender an age, why could not the same privileges have been extended to another youth by the University here,—modelled after that of Edinburgh—to which we point with pride, under the shadow of Mount Royal?”

During the evening Drs. Desrosiers, Craig, Guerin and others enlivened the banquet with songs.

Dr. Girdwood in a neat speech proposed the health of the Chairman, which was most enthusiastically received. Dr. F. W. Campbell replied briefly, giving some interesting incidents of medical students' life in Montreal almost fifty years ago; after which God Save the King was sung, and a very pleasant and memorable banquet was closed.

**VALEDICTORY ADDRESS TO THE GRADUATING CLASS
AT THE 31ST ANNUAL CONVOCATION OF THE
MEDICAL FACULTY OF THE UNIVERSITY OF
BISHOP'S COLLEGE, APRIL 23, 1902, BY WILLIAM
E. DEEKS, M.D., LECTURER IN MEDICINE.**

The members of the Faculty of Bishop's College unite in extending to you their heartiest congratulations on the completion of your college curriculum course, which you have so diligently pursued during the past four years.

It requires no small amount of courage to initiate a course of study fraught with so much laborious work, and extending over such a long period of time; and he who has successfully accomplished what he began, deserves not alone the formal congratulations of his friends, but more, he deserves that degree of success in life which falls to the lot of the talented, ambitious student. For who knows better than he, "Over rough roads indeed, lies the way to medical glory."

You have reviewed to-day, in your valedictory address, your college career, have shown grateful appreciation to those who have so strenuously laboured in your behalf, have said farewell officially to the old halls which you have learned to love so well, and which have so oft echoed with your college songs, have closed, so to speak, one epoch of your existence, and completed the preliminary training, preparatory to launching forth your boat on the great sea of practical life, in the "struggle for existence," which must terminate in success or failure. We sincerely trust and hope the former. With that end in view we cannot do better now than offer you a few sug-

gestions which, we trust, may be of service to you in the practice of your profession.

It appears to me that the first question each one of you should ask yourself is:—"Am I in the right profession to best exemplify my talents; where I can be happy and contented to best exemplify my talents where I can be happy? You may have been impelled thereto, through the pet whim of some doting parent, or misguided, wealthy aunt, or because the respectable calling of the profession induced you to enter in view of imaginary, pecuniary advantages; or not knowing what else to do, and morbidly curious, you entered its ranks. Gentlemen, let me tell you, now, that unless your motive for entering the profession of medicine is ulterior to these, unless you have an enthusiastic love for the work, a burning scientific desire to do good to your fellowmen, unless the vocation be congenial in every respect, stop right here, correct your mistake, disregard the adverse criticism of idle gossip-mongers, and enter that business or profession where your talents lie, where you can be enthusiastic in your work, happy and contented. "Be sure you are right and then go ahead." Even should you enter another profession, your time has not been wasted; you have gleaned a scientific knowledge over a large range of subjects, have been taught unselfishness, true manliness and to sympathize with the sufferings of others. Better far to have erred for four years and been corrected than to live a life of one constant grand mistake.

You must next consider whether you will begin now actively your practice, or first enter a hospital for an indefinite period. Those of you who can afford it cannot do better than spend some time in a hospital (if a position be obtainable), as you will then be able to digest and assimilate the knowledge you have been persistently cramming. It begets confidence in yourself which is so essential. If you have no confidence in yourself, how can you expect others to confide their lives in your hands? Hospital training does that, and helps to fix in your mind a large number of practical little things which the ordinary student has no opportunity of obtaining.

Our methods of training the student, clinically, are in some respects grievously at fault.

The clinical material in the out-door departments is not utilized as it should be. It is this class of cases that you will meet with in your every-day practice; you are sent into the wards to study pneumonia, typhoid, pleurisy, tabes dorsalis; and a variety of rare conditions gathered from the four corners of the earth, and know nothing about the treatment of a common cold or colic or the application of a mustard plaster. This you must acquire from your own experience, or humiliatingly accept your lessons from an old housewife or nurse, who usually will communicate your inexperience and ignorance to the neighbours, and this will not redound to your advantage.

If this be true of the medical department, how infinitely worse is the surgical. You are expected, yea, are compelled to sit on the benches for hours at a stretch, watching the skilful manipulations of surgeons, day after day, on operations which you would never pretend to attempt without a special training, instead of hearing surgical clinics on differential diagnosis. When you have once learned the technique of an operation, which is readily acquired, you will only profit by remaining through it if you are taking a practical part. Otherwise, your time is better employed in assisting in the simpler things one sees in the out-door departments.

In this way, then, you would be the better of a hospital training by seeing the practical little things, oft the forerunners of great ones, and dealing with them.

The next point you have to decide is location. Will you undertake a country practice with its arduous, though healthy life and promise of quick returns, or will you go to the city, where the profession is now overcrowded. The guiding principle it appears to me is, to seek that life, country, town, or city, most congenial to your nature, that place you would best like to live in and go to work. You cannot be happy and successful living any place if your mind is constantly reverting to some other locality.

Having decided those points, your attitude towards your fellow practitioners, members of irregular schools, and your patients must be your next consideration.

Do not delude yourself into thinking that you will be a welcome visitor in any community by your fellow practitioners. You will engender a certain amount of jealousy and animosity. They will resent your entrance into a field considered peculiarly their own. They know that by your coming their incomes will be curtailed and their bread-winning powers interfered with.

Let your manner, however, toward your seniors be dignified, courteous and respectful, and know well that though you, fresh from the college halls and pathological laboratories, may know more about the microscopical aspects of pathogenic bacteria, liver cirrhosis, or compounded-mono-syllabic tumours, still, he may, "with a face like a benediction," carry in his head experiences which years only can acquire, a sympathy and wisdom which ripens as did McClure's, a dignity and self-possession which will put crude foppishness, snobbish dilettanteism and blind egotism to shame, though you may seem from your pedantic, linguistic expressions as though you had been at "a great feast of languages and stolen all the scraps."

Your instincts, coupled with the training you have had of human nature, will soon enable you to know where merit lies, where science ends and charlatanism begins, whom to select as your professional companions, in whom you can confide and trust, who will prove helpful to you and whom you can reciprocally help.

"Be to their faults a little blind and to their virtues wondrous kind," and you will find in the end that it pays.

Of irregular schools of treatment what shall I say? Is their very existence not an unfavourable comment on our own narrow-mindedness?

We should remember that the medicine of to-day is a developing, not a developed science, that as marvellous things have been from time to time revealed, stupendous in their far-reaching effects upon disease, so just as marvellous will yet be discovered, that there may be and undoubtedly is a grain of truth in every system that prevails irrespective of its nomenclature. Had we not physicked and bled our patients a few years ago almost to death's door, homoeopathy with its infinitesimal dosage

would never have sprung into existence, had we realized a little more the advantages of massage in this modern, fortune-making, indolent-living age, osteopathy would never have been heard of; had we appreciated fully and been able to find the proper sphere for suggestibility in those cases, particularly where idleness in a restive disposition begets the habit of introspectiveness and leads to all sorts of functional neuroses, then Mrs. Eddy with her Christian science would have been unknown, and another human flower, now notorious, "born to blush unknown."

Let us, gentlemen, be tolerant, broad-minded, receptive, acknowledging merit wherever found, and endeavour to separate the germs of truth from the mountain of chaff, no matter how colossal the disproportions. Nothing will help to spread a false science more than to decry it, especially if that science can show results. These schools do show results for each and all of them, are the handmaidens and recognized methods of treatment of the regular schools, under different names, but not utilized or appreciated as they should be. No amount of ranting and talking will convince a man that he was wrong to be cured of rheumatism by an osteopath, when you, by all your nostrums, failed to do so. Novelty attracts credulous humanity, and osteopathy may do more to restore an individual than massage, though the methods are almost the same and the latter infinitely cheaper.

Now, what attitude must you adopt towards your patients? You will not long be settled in a community before the public will begin to feel your pulse even before you feel theirs; they will want to know your politics, your religion, and whether you are sporty. Give certain classes of individuals a little latitude, and they will want to contaminate your office with smoking, gossip, and perchance a friendly game of cards; but be warned that just as soon as you permit your office to be the resort of idlers, loungers, gossip-mongers, jockey and baseball enthusiasts, just so soon have you driven the first nail in your professional coffin.

Never allow that class of man to become familiar; "familiarity breeds contempt." He will not only waste

your time, but superciliously look askance when you seek reward for your services. He will soon call you "Doc," and disgrace you. The man who dubs you that insults you, and if it calls forth your immediate resentment, you will keep yourself free from the meanest, most contemptible stigma that attaches to a professional man, detracting from his dignity and degrading to his moral tone and self-respect. If your aim be to attract the best class of practice, do not Tim, John, Jessie, Kate anybody, Such is justifiable only on terms of the greatest intimacy, or to your servant or lackey.

If you would be respected, preserve your self-respect. "Never seem a saint and play the devil," be straightforward, honest and honourable, and don't forget that you are gentlemen by profession as by training." "The successful man knows nature as well as his profession." If you would succeed, you must be able to do more than diagnose a case and prescribe some nauseating dose, you must study your case on its own merits, and realize that you are treating a human being with intelligence, and not an animal. No two natures are alike. "What's one man's meat is another man's poison." Be tactful as well as skillful, never jump at conclusions or make snap diagnoses. If not certain, keep your mouth shut till your judgment is formed, remembering that "the silent man has much in his favour." Never exaggerate the gravity of a case. Some physicians make themselves ridiculous and think they magnify their own importance by doing so. That may be swallowed by men gullibly ignorant, but not by men of common sense who can see through deceit so obviously and odiously transparent.

Be frank and take the patient or the patient's most intimate friend into your confidence. If the case be serious, never be ashamed to acknowledge it; if uncertainty exists, then seek a consultation. It will beget confidence in them for you, and they will be more reliant on you and your judgment in future.

Never gloat over big operations as though you revelled in blood and cutting, and were devoid of feeling, the butcher element predominating.

Man is an animal, but one of the highest order, endowed with a delicate, nervous organism, acutely sensitive to pain, and external impressions. His whole nature resents and revolts against a cruel action or an unkind word, particularly if laid on a bed of sickness; but appreciates sympathy, kindness and consideration. Never forget, also, that wealth or position in life never makes us more sensitive to pain or suffering. The squalid hut of poverty may be the home of the most delicate and timid creature. Be kind, considerate and tender in your manipulations where suffering is, and you will receive gratitude in return. Particularly is this applicable to the fair sex. "Woman, fairest of creatures, God's last and best gift to man." Sensitive, modest, retiring, acutely intuitive, craving for sympathy and hope in suffering, for consideration and respect in health. In your relations with them never forget that "immodest words admit of no defence, for want of decency is want of sense." The medical profession is undoubtedly a grand profession, carrying with it enormous responsibilities, not alone of life, but of the happiness and characters of individuals which it is your duty to safeguard and protect. You are the guardian of inviolable secrets sacred as God's laws. Be not their betrayer. A word, a thought, an action from you may be the ruination or the salvation of a life. Yours it is to relieve pain, restore health, bring comfort, console and cheer, and though your remuneration be but the look of gratitude, your duty must never be slighted; never shirked. You need never expect to amass wealth from your profession. Many and many physicians are spending their lives "Dropping buckets into empty wells, and growing old in drawing nothing out." Instead of that, however, you may confidently expect, and will assuredly receive from many what to some natures is infinitely sweeter far, absolute confidence, implicit trust, grateful appreciation and undying love. And when your faculties begin to dim, and the sunset of life with evanescent ray lights up the gray hairs of declining years, and hoary age, ripened with deeds of love and charity, beckons you to your last resting place, you will have the keen satisfaction of being surrounded by those whose lives you have

gladdened and perchance have saved, whose hearts comforted, and sorrows soothed, pouring benedictions on your head, and then you will feel that you have not lived in vain, and will welcome the "Eternal hope which, like a rainbow of summer, gives a promise of Lethe, at last."

The Faculty unite in wishing you farewell and God-speed.

**THREE CASES OF VAGINAL HYSTERECTOMY, WITH
REMARKS ON THE FUTURE OF HYSTERECTOMY
FOR CANCER.***

BY A. LAPHORN SMITH, B.A., M.D., M.R.C.S., ENG., MONTREAL, P.Q.

Fellow of the American and British Gynaecological Societies; Professor of Gynaecology in the University of Vermont, Burlington; Professor of Clinical Gynaecology in Bishop's University, Montreal; Surgeon-in-Chief of the Samaritan Free Hospital for Women; Gynaecologist to the Western General Hospital; Gynaecologist to the Montreal Dispensary, and Consulting Gynaecologist to the Woman's Hospital, Montreal.

As my mental attitude towards cancer of the uterus has undergone a great change during the past year, and as my present method of treating it promises a certain cure in every early case in which it is employed, it may be of interest to briefly outline my experience during the last ten years, which will at the same time explain how I have come to accept my present course of action. In the early days of my work hardly a week used to pass without a patient coming to me with the cervix a mass of cancer, and with the broad ligaments full of the same disease, so that it was impossible to draw the uterus down, even as much as a quarter of an inch. Too often the whole vagina was infected, and in two or three cases there was a large opening into the bladder or rectum which rendered the poor creature's life a living death. At that time nothing was attempted for the relief of these patients except to keep them as free from pain as possible by means of opium or morphine suppositories. The smell was so horrible that their friends and relatives might well be forgiven for praying for their death. And when death at last came, either from sepsis or hemorrhage, every one, including the patient and doctor, was very glad. Now,

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until the happy release, even in these hopeless cases, we can do much for the comfort of all concerned. By curetting away all the necrosed tissue with a sharp curette, and cauterizing the remaining tissues with the thermo-cautery, it is possible for a patient who is in a hopeless condition as far as any curative operation is concerned, to live for several years almost without knowing that she has the disease, and for her eventually to die a painless death from cancer of the liver or other internal organs. Indeed, I feel sure that the heat of the actual cautery is the most powerful means we possess of arresting the disease. This is proven by the much better ultimate results obtained by Dr. Byrne, of Brooklyn, than by any one else. He amputates the cancerous cervix with the galvano-cautery knife, and he has many cases living after from five to ten years. Many of my own cases have been curetted two and three times at intervals of from three to six months, so that I know of several who were still alive nearly two years after the disease had reached the hopeless stage. So much for the cases which are too far advanced for hysterectomy.

Now the question comes up: "Which cases are to be classed as hopeless, and which are we justified in performing hysterectomy on?" It is precisely on this point that my opinion has undergone a decided change. Up till my visit to Brussels four years ago, I was doing vaginal hysterectomy for all those cases in which the uterus was at all movable even if the broad ligament on one or both sides was rather thicker than usual. But I had noticed that while the death rate of the operation was slight, the disease advanced much more rapidly than it did in the much worse cases which were only curetted from time to time. So that at the end of two years from the operation there was not one woman living, and most of them died within a year. On discussing this point with Jacobs, of Brussels, he told me that his experience, which was far more extensive than mine, was exactly similar. So much so, indeed, was he impressed with this common observation that he told me he had given up removing the uterus for cancer altogether! When I returned home I adopted a new course; I ceased removing the uterus whenever the broad ligaments were infiltrated, even if the uterus were

fairly movable, and contented myself with the palliative treatment already described. In other words, I placed all these cases in the hopeless class, but assured them nearly two years of comfort for themselves and their friends, instead of giving them only three to six months, during most of which they suffered. But to make up for this I devoted all my energies to discovering as many cases as possible while the disease was strictly limited to the uterine tissue and before it had spread to the cellular tissue in the broad ligaments. I made a vigorous campaign in the medical journals, calling upon the general practitioners to spread information among their patients as to the danger of irregular uterine hemorrhages in women over forty-five, especially if they had had the menopause, and their periods had left them for several years. This was very important, as it had been the general opinion among women that this return of bleeding from the uterus was a subject for self-congratulation as indicating a renewal of the vigour of youth. Another fallacy which I asked them to correct was that as long as there was no bad odour from the vaginal discharge, there was no need to suspect cancer. On the contrary, when the bad odour makes its appearance the time for vaginal hysterectomy has passed, so that it is of the greatest importance to discover it before it has reached the bad smelling stage. My crusade has been successful; thanks to the general practitioners who have come within my influence. I no longer see these terribly neglected and terribly smelling cases which I used to see so often ten years ago. Although in many of them still the disease is perilously near the hopeless condition above mentioned, this is not the fault of the family doctors who, as a rule, send me the case within a few days of its discovery, instead of losing six precious months cauterizing the cervix before sending them to me, as they formerly used to do. Since the women themselves seldom consulted their family doctor until the disease was considerably advanced, the next duty which I felt that we owed these women was to look for cancer before the women complained, and to urge an examination, especially in all cases where there was bleeding on intercourse, or where the menstrual flow was becoming more profuse

at forty-five instead of getting less. The result has been that gradually, year by year, I have been getting these cases earlier, until now it is the exception, rather than the rule, to find, on removing the uterus, that the disease had not yet entered beyond the uterine tissue, and consequently these women have all been saved from a horrible death. In these cases, of course, most rigorous precautions have been taken to avoid infecting the healthy cut surfaces; first the vagina and external genitals are thoroughly disinfected with soap and water and bichloride; then the cauliflower growth is cut off, and the uterus curetted and disinfected with carbolic acid, and then cauterized with the Paquelin cautery, until dry; the cervix then being packed with sterilized cotton and then tightly sewed up. Many such cases which would have been ultimately saved have died through reinfection during the operation.

And now I come to the last advance; one which, as I have stated, will save every woman so treated from death from cancer. Several times during the last ten years I have had occasion to perform Schroeder's amputation of a badly lacerated cervix of long standing, in women over forty-five years of age; and during the operation I have found the tissues friable and brittle; so that the ligatures would sometimes cut out. Much to my disappointment some of these women afterwards died of cancer. I therefore came to the conclusion that in all women over forty-five who were bleeding profusely or irregularly I would take no chances, but head off the fell disease by removing the whole of the uterus! I felt the more justified in doing this because of the number of cases I have seen in which the cervix was apparently all right, but, on opening the uterus after removal, undoubted cancer of the fundus was discovered. In Cullen's work on cancer of the uterus there are many engravings which illustrate my point, which he evidently believes in very thoroughly. I have already said in several of my papers on cancer of the cervix, that if every woman with a lacerated cervix had it repaired within a year after its occurrence, death from cancer of the cervix would be unknown. (It is not safe, I might mention here, to let these women go around with a bad laceration until they are nearly forty-five; for sometimes

I have seen women of thirty or thirty-three have cancer develop on a tear). I will now say that if every woman with menorrhagia at forty-five had her uterus removed by vaginal hysterectomy, death from cancer of the fundus would also be unknown! With such an object in view, I am sure I will not appeal in vain to the hundreds of general practitioners who read these lines, and in whose hands alone rests the fate of the thousands of women who, as above shown, are likely candidates for death from cancer.

The following three cases, briefly stated, were treated on these lines:

Montreal; widow; first menstruated at 12, being painful
Montreal; widow; first menstruated at 12, being painful and coming on every three weeks; mother of eight children, two of them twins, born at 7 months; never delivered with instruments; one confinement 18 years ago was severe, and she was never as well since, always being nervous. Her periods left her at 45, and she saw nothing till 47, when she began to have irregular hemorrhages. She had a great deal of pain with her womb, very little "whites," and there was no bad smell, but Dr. Wilson informs me that the discharge was watery and very acrid, as it excoriated the skin around the vulva. Moreover, her mind was seriously affected, and it was a question whether she would not have to go to the asylum. Vaginal hysterectomy was performed on the 6th of February with no trouble whatever; the operation only requiring eleven minutes from first incision until the uterus was out. The latter was double the normal size, and retroverted, and on cutting it open a hemorrhagic area, the size of half a cherry, was found near the fundus. She made a rapid recovery and went home in three weeks.

Case 2. Mrs. M., widow, 49 years of age, sent to me by Dr. Maas for profuse and too-frequent menstruation. Her periods first began at the age of 14, and were always abundant. She was married at 19, and in the next eighteen years she had fourteen children, the last one 11 years ago. Menstruation now comes on every three weeks, and is very profuse, large clots coming away, and between the periods she has a profuse yellow discharge. On examina-

tion the uterus was found retroverted and there was a deep laceration extending up to the internal os. The everted lips cannot be brought together owing to the amount of hypertrophy and cystic growth. On introducing the sound very gently profuse bleeding began. Going on the principle that if she did not already have cancer she was on the verge of having it, I had no hesitation in advising the removal of the uterus, in which she and her doctor heartily concurred. This was done two weeks ago, and she is now going around looking very much better, and will go home in another week.

Case 3. Mrs. B., sent to me by Dr. Smythe. She gave me the following history: She is now 38 years of age; her menstruation began at 12; this was normal, except that she was very ill for a year, when she was 18; she was married at 23, and has had three children, the last one 10 years ago; instruments were used (by a doctor whose name I will not mention) after being in labour only about two hours. This "finished her," for she had no children after that; in fact, she was in bed for the next five months. Her menstruation left her at thirty-five, but after three years it began again very profusely and irregularly, and she also bleeds freely on coitus or digital examination. Since two months she has had a profuse watery discharge. On examination, I found a cauliflower growth pretty well filling the pelvis. Vaginal hysterectomy was performed a week ago with the precautions above mentioned; the uterus was retroverted and densely adherent; so that the thickening of the broad ligaments may have been partly due to this cause. In this as in the other three cases, the clamp method was employed, the clamps being removed at the end of forty-eight hours. She is feeling and looking much better already, and will be able to go home in two weeks.

My only regret is that this case was not discovered before the disease was so plainly evident. Her chances are surely much less than those of cases one and two—from whom the uterus was removed while it was still quite certain that the disease was limited to the uterine tissue.

248 Bishop street, Montreal.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

TEMPERATURE, PULSE AND RESPIRATION IN THE DIAGNOSIS OF DISEASES OF THE BRAIN.

J. T. Eskridge concludes a lengthy article in the *New York Medical Journal* of September 28, 1901, by the statement that the temperature, pulse and respiration offer valuable information in the diagnosis and prognosis of certain diseases of the brain. A change in the character of the respiration, rather than in its frequency, is sometimes one of the first positive symptoms of organic intracranial disease, especially of tubercular meningitis. A respiration that is more frequent while the patient is asleep or unconscious than it is during the waking or conscious moments is very strong evidence of organic disease of the brain so situated as to interfere with the respiratory center.

Apoplexy due to hemorrhage is attended with greater disturbances of the temperature of the body soon after the occurrence of the stroke than is the case when apoplexy is due to thrombosis or embolism. The cerebral hemorrhage attended by hemiplegia is usually accompanied by a slow fall in the axillary temperature, occurring within an hour or less, and the fall is most marked on the paralyzed side. After reaction has occurred, which commonly takes place in from eight to twelve hours, there is a rising temperature, which is a little greater on the paralyzed side.

In cerebral thrombosis there is little disturbance of temperature before the end of the second day, except in the severest cases. An elevation beginning with the second day, extending to the fourth day after the stroke, is significant of thrombosis and shows that secondary softening has taken place, which, if extensive, makes recovery doubtful.

If the temperature on the paralyzed side remains persistently elevated some weeks after a stroke, it shows that the softening and inflammation are going on, and the prognosis is correspondingly grave.

The writer says that it is premature to formulate definite conclusions on the temperature, pulse and respiration in injuries to the brain. It is possible that if these cases received more detailed study, useful deductions might be made from a considerable number of them. The following tentative conclusions are justifiable:

(a) In injuries to the head where the temperature does not reach normal or slightly above after a few hours after receipt of the injury, the prognosis is very grave. The higher the temperature, the greater the possibility of contusion and laceration of the brain and its membranes. The greater the variation of the temperature from normal, either above or below, the worse the prognosis.

(b) A rapid, weak, intermittent or irregular pulse denotes danger. The pulse that is at first slow, but soon after becomes rapid, indicates a progressive intracranial lesion and justifies a bad prognosis.

(c) An exceedingly slow and intermittent respiration indicates a lesion at the base and posterior fossa. A respiration at first nearly normal in frequency, but which later becomes quite rapid, indicates a rapidly fatal case.—*Medicine.*

HYSTERIA.

As a lack of proper controlling psychic influence occasions this unbalanced action of the nervous system, psychic influence brought to bear by the medical attendant may exert great power in controlling the disorder. Let your will power stand in the place of the patient's for the time being.

Next, the nervous centers can be brought to their senses through the sensory nerves. Hence, the value of inhalations of nitrate of amyl or of carbonate of ammonia in hysteric spasms, or feigned catalepsy; or, of a deluge of cold water in hysterical convulsions. Sumbul has a remarkably soothing effect in some cases. The therapeutic measures, where the patient is of high nervous development, and there is emotional disturbance simply, are camphor, valerian and soothing neurotics.

If the hysteria proceeds from disturbances of the reproductive organs, the bromides are indicated. Bromidia I find one of the best remedies where there are convulsive paroxysms. I have used comp. spirits lavender with good effect; also valerianate of ammonium. In persistent cases valerianate of morphia.

States of mal-nutrition call for ferruginous treatment. There is now such a long list of reliable preparations of iron we have large liberty in choosing. I am in the habit

of using bark, iron and strychnine. Also, when there is a strumous habit, iodide of iron, valerianate of iron, valerianate of zinc, and valerianate of quinine, each one grain, pill form, is a favourite formula with me. It has real value in giving tone to the nervous system.

I have used chloride of gold and sodium to advantage in some cases where there was evidence of spinal irritation and strumous diathesis. Oil of sassafras, one ounce, to alcohol, one pint, is a good application for the spine where there is evidence of spinal irritation.

Massage and electricity are auxiliaries to improve the circulation and stimulate nervous and muscular action.—Dr. George Covert, in *Chicago Medical Times*.

BAD COLDS.

For the benefit of those members of the profession who are on the outlook for improvements on the methods of by-gone days, I venture to offer a single remedy for the treatment of a "bad cold." Gelsemium is not only useful in those cases which would recover without medication, but is also efficient where formidable symptoms are present, and, judiciously employed, may be the means of averting an attack of pneumonia, pleuro-pneumonia, pleurisy or other serious disease beginning in the form of a bad cold. Gelsemium arrests profuse nasal secretions, quiets headaches and neuralgia, subdues cough and pain, favors a re-establishment of the secretions, through its influence upon the skin, kidneys and gastro-intestinal tract.—*Chicago Med. Times*.

TREATMENT OF BRONCHO-PNEUMONIA.

Caille (*Post-Graduate*) says that the great danger in this disease is suffocation, through filling up of the air cells with secretion and from heart failure and pulmonary edema. Here heart tonics and expectorants are indicated. In desperate cases raise the foot end of the bed four inches; and so get gravitation of secretions toward the mouth or make use of artificial respiration. Good results from venesection are hardly to be expected in young children. As a stimulant and heart tonic he uses camphor, strychnine or nitroglycerin, and occasionally digitalis or ammonium carbonate. You may give half a grain of camphor in five grains of sugar or

Camphor gr. 15.

Ol. amygd. dulc. dr. 11.

Sig. Five minims hypodermically.

Or you may give camphor ($\frac{1}{2}$ gr.) digitalis (1 gr.) and benzoic acid (3 gr.) combined. Caffein and sodium ben-

zoate (1 to 2 gr.) may be given hypodermically. Whisky and water may be given if necessary. If the fever is from 105° to 106° F. and there is such twitching that convulsions are feared, antipyrine (3 to 5 gr.) may be given in water per rectum. This will reduce the fever two or three degrees for several hours. When the acute attack is over and resolution is delayed, potassium iodide should be given by mouth or by rectum. In delayed resolution, with or without fever, think of serous or purulent effusion, and use the aspirating needle to detect it.—*Med. Standard.*

THE MEANS OF ARRESTING ACUTE ENDOCARDITIS.

I wish to point out the great advantage to be derived from the combined use of blisters and poultices in the earlier stages of acute endocarditis, pneumonia, pleurisy, etc., where pain is a marked and troublesome symptom.

A blister of the requisite size is first placed over the point where pain is most acute, and is firmly fixed with adhesive plaster. A large linseed meal poultice, as hot as it can possibly be borne, is at once applied above the blister and changed as often as is necessary until the latter has fully risen. The blister is then punctured and dressed in the usual way. When this has been done a thick layer of cotton wool or spongiopiline should be placed over the entire surface lately covered by the poultices, to prevent any possibility of chill, and allowed to remain *in situ* as long as may be considered desirable.

In recent years poultices have, no doubt, fallen into more or less disuse, but no one who has had personal experience of the immense relief which they give in painful inflammatory disease will fail to use them in suitable cases.

They should, however, be applied at the very commencement of the disease, and be discontinued as soon as the pain has been relieved. Their beneficial action is, no doubt, due to the fact that they produce a very decided determination of blood to the surface, thereby increasing the exudation of serum and lessening nerve sensibility.—Dr. G. H. Young, in *N. Y. Lancet*.

GASTRIC PAIN.

For many years Prof. Whitford has taught his classes to prescribe the bicarbonate of soda freely where there is persistent pain in the stomach, often depending upon gastric ulcer. Sir Lauder Brunton has recently advised that a teaspoonful of the bicarbonate of soda in a little lime water,

to which the essence of peppermint has been added, gives a more speedy relief from pain from gastric ulcer than morphine; in many cases, by the neutralization of acid fluids present, do produce relief where morphine will not.—*Chicago Med. Times*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.

Lecturer on Surgery, University of Bishop's College; Assistant Surgeon, Western Hospital;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College; Assistant Surgeon, Western Hospital.

SURGERY OF THE BILIARY PASSAGES.

John B. Deaver, in the *International Journal of Surgery* for October, 1901, presents an excellent resume of the surgery of the biliary passages. There is no department of surgery in which skill in diagnosis is more essential than in dealing with the gall-ducts and their diseases. While gall-stones are found with great frequency post mortem, it is to be remembered that in 95 per cent. of the cases there are no clinical symptoms. Cases of latent stone are liable to sudden attacks of inflammation which rapidly jeopardize the life of the patient, unless surgical relief is given. The two conditions caused by gall-stone are mechanical obstruction and inflammation, the latter being by far the most important. In all diseases of the upper portions of the abdomen, the gall-bladder should be carefully considered as a factor in its production. If this structure can be felt enlarged as a rounded, tender mass, it forms an easy clue to the trouble. Unfortunately, in most cases of gall-bladder disease it is reduced rather than enlarged, owing to the repeated attacks of inflammation. Gall-stones without inflammation of the gall-bladder or duct only exceptionally cause trouble. They are not given to wandering along the ducts and thus causing obstruction, but they do excite inflammation which prevents drainage of the biliary passages.

In a large proportion of cases the gall-stones cause no trouble, but when they have excited an inflammatory process the period for conservatism is past, and the sooner operation is undertaken the better. Nature may successfully deal with this inflammatory reaction, but usually it recurs again and again, the larger stones remaining in the gall-bladder.

A difficulty in the diagnosis of these cases lies in a belief on the part of the profession and laity that gall-bladder disease is always accompanied by jaundice; this symptom is nearly always lacking or transitory.

Simple catarrhal inflammation, unaccompanied by gall-stones, need excite little apprehension. If stones are present, operation should be undertaken, as dangerous complications may develop rapidly. Where there have been repeated attacks of biliary calculi, it is useless to rely upon medical treatment, as the stones may cause pressure necrosis, empyema, or perforation.

Another form of catarrh of the gall-bladder without gall-stones occurs in the course of the infectious fevers. The only symptoms are a slight tenderness over the gall-bladder, an increase in its size, and slight elevation of the temperature, and if the process is severe, a leucocytosis. This is a form of cholecystitis due to infection of the gall-bladder with obstruction of the cystic duct. It subsides spontaneously as a rule, but should be watched closely, as there may be a rapid development of grave complications.

In inflammatory cholelithiasis, two different sets of symptoms are found, according as the stones are found in the cystic duct or in the hepatic or common duct. When in the gall-bladder or cystic duct, they give rise to enlargement and colic. The gall-bladder in time becomes chronically thickened and often ulcerated, and finally contracted. Such a gall-bladder is always infected. Jaundice, if present, is due to a secondary inflammation of the common duct. When the stones are in the common duct, important functions of the liver are threatened and the symptoms are very serious. In these cases the flow of bile is obstructed and jaundice is always present. This latter class of cases is sometimes accompanied by an infection, with general septic intoxication or abscess of the liver. As a rule, jaundice which accompanies gall-stone disease is intermittent.

When jaundice has existed for a long time there is a tendency to hemorrhage, which adds to the difficulty of operation. As a rule the diagnosis must be made after the abdomen is opened, and it is only then that the necessary surgical procedures are indicated. In a general way all stones must be removed, so far as possible without injury to the ducts, together with the establishment of free drainage. How these indications are to be met must be decided by the circumstances of the individual case. Exceptionally can all stones be removed and a bladder closed without drainage, and only in recent cases. Where

there is any question, it is better to drain the gall-bladder. Drainage into the duodenum is preferred. The operation for connecting the gall-bladder with the duodenum is one of considerable delicacy, and if the surgeon feels any doubt as to his capacity for dealing with this operation, it is better to drain externally. In cases where the gall-bladder is gangrenous, excision is advisable, and this adds little to the gravity of the operation. If there is doubt of the integrity of the gall-bladder, it is wiser to remove it. It should never be forgotten that in gall-bladder surgery the bile is always infected, and it must be prevented from coming in contact with the peritoneum.

Early operation is urged in extensive disease of the gall-bladder and its ducts, as in this way the fatal liver and kidney complications do not develop. It is a good working rule to operate early in the disease rather than early in an attack, but operate early in an attack rather than not operate at all.—*Med.*

FISTULA IN ANO AND ITS RELATION TO PHTHISIS.

Fistula is a very common rectal ailment. Out of 16,060 rectal cases treated at the St. Mark's Hospital, London, over 50 per cent. were fistula, of which a little more than one-half were men. Again, fistula and phthisis very frequently go together, as evidenced by Allingham's statistics, who reports 1,632 cases of fistula, 234 of which had tuberculosis. The author estimates that 4-6 per cent. of all tubercular patients suffer from fistula, while a much larger percentage of fistula patients have tuberculosis.

Fistulae, as found in tubercular subjects, are of two kinds:

1. True tubercular fistula, the result of localized deposits.

2. Fistulae, induced or made difficult to cure, by persistent cough and lowered vitality—the result of phthisis.

1. True tubercular fistula, caused by swallowing tubercular sputum or by ingestion of food infected with the bacilli.

2. Non-tubercular fistula are frequent in phthisical subjects. Very troublesome of treatment, because (a) these subjects are prone to suppuration from slight causes; (b) the absorption of fat of the ischio-rectal fossa deprives the larger blood vessels of their natural support, resulting in congestion and dilation; and (c) the persistent coughing of these phthisical patients causes a bruising of the parts about the anus which is an important etiological factor in the production of abscess and fistula.

DIFFERENTIAL DIAGNOSIS

The principal points to be borne in mind in diagnosing the tubercular from the non-tubercular fistula are: In the non-tubercular the internal and external openings are small and round, the edges red, situated in the center of an elevation. In the tubercular, on the other hand, the internal and external openings are large, triangular in shape, the edges bluish and drooping into the opening; the non-tubercular discharges but little, and the material is yellow in colour. The tubercular is characterized by a profuse, whitish, watery discharge. Again, the non-tubercular is sensitive to the probe, the tubercular much less so, while the tight sphincter, normal development of hair about the buttocks in the non-tubercular fistula contrasts strikingly with the patulous anus, and long, silky hair about the parts, and which are always present in the tubercular cases. Naturally, it must not be forgotten that the finding of the bacilli in the discharge is proof positive of the origin of the trouble, though their absence does not indicate absence of tuberculosis.

TREATMENT.

Palliative.—Consists principally in taking proper measures to drain thoroughly, assist healing by the application of stimulating astringent and antiseptic substances, and for the rest to insist upon good food, regular habits, proper hygienic surroundings; in short, such measures as would tend to better the patient's general condition.

However, the author operates upon all fistulas, tubercular or non-tubercular, when the general conditions of the patient permit, and then advises change of climate and anti-tubercular treatment if it is a case of phthisis.

Anaesthesia.—When a local anaesthetic is indicated, cocain or beta-eucain. As a general anaesthetic chloroform is preferred, as the recovery from it is quicker, vomiting less, and it has the further advantage of not irritating the lungs or kidneys.

Operation.—1. Ligation. 2. Division. 3. Excision.

Ligation consists in passing silk, wire, or elastic ligature through sinus and anus. The special advantages claimed are, that it requires no anaesthesia, causes neither pain nor bleeding, and does not confine the patient to bed, on the other hand, it takes longer to cure and does not divide branch sinuses.

Division consists in passing a grooved director through the sinus until its end is felt by the finger, previously in-

troduced into the rectum, when it is withdrawn and rests upon the anus. The bridge of tissue is then divided, the sinus thoroughly curetted; if tubercular, cauterized; then packed. It is important to find and treat similarly all branch sinuses.

Excision consists in dissecting out the whole sinus, suturing and healing by primary intention.

The conclusions the author wishes to impress are:

1. Tubercular fistula is secondary to tuberculosis of the lungs.

2. Pulmonary tuberculosis is rarely, if ever, secondary to fistula in ano, either before or after the operation.

3. Tuberculosis of the anal region requires the same radical treatment that is recommended for tuberculosis of other parts of the body.

4. When general conditions are favourable, operate on all fistulas irrespective of the kind.

5. No evidence that the cure of fistula will induce phthisis.—Dr. G. S. Gant, in *Med. Rec.*

CORNS.

Dr. E. L. Wood, of Danville, N.Y., writes: "A radical cure for corns consists in paring the callosity as closely as possible without causing any hemorrhage, then placing in the center of the corn a very small drop of croton oil, and bandaging for twelve hours. Then remove the bandage and paint the corn with reliable cantharidal collodion; a pustular bleb will result, in the formation of which the entire callosity, nucleus and all, will be raised without very much pain from the tissues beneath, and can be easily removed. The process should be conducted under the care of a surgeon to insure prompt sterilization of the part after the callus is removed. Healing has always been rapid, not requiring more than three or four days, with no liability to recurrence unless the foot is afterward abused. I have treated active working patients without a loss to them of more than half-day's time."—*Courier Record of Medicine.*

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Editorial.

DR. RODDICK'S MEDICAL COUNCIL BILL.

As our readers are aware, Dr. Roddick, M.P., who represents the St. Antoine Division of the city of Montreal, has, for the last three years, at each Parliament, introduced a Bill, having for its object the formation of a Dominion Medical Council. There are very special reasons why such a Bill should be put in force at as early a date as possible. When first introduced, this Bill met with considerable opposition, chiefly in Ontario and Quebec and British Columbia. Dr. Roddick spent much time in visiting the centres of Medical education in various provinces and fully explaining its details. Friendly suggestions were received and the Bill amended, accordingly. The result of these interviews was that a Bill, satisfactory we think to the great bulk of the profession in the Dominion, was introduced into the present Parliament. It was felt, however, after its first reading, that the small professional minority opposed to it, even in the forms it then possessed, had developed considerable strength in the house, and that further amendments to it would be necessary. The question as to the power of the Federal Parliament to pass such an act was fully admitted by both the first Minister of the Crown and the Leader of the Opposi-

tion, and when it came up for its third and final reading, it consequently received the support of both. Previous, however, to its adoption, an amendment was made and accepted by Dr. Roddick to the effect that before it can come into force it must receive the support by legislative enactment of all the Provinces in the Dominion. In this form it passed the House of Commons, and was, with trifling amendments, then passed by the Senate. The position, now, as we take it, is, that the Federal authorities have provided the machinery by which a great and most important measure can be put into operation. In moving its second reading, Dr. Roddick entered into a full and lucid explanation of the entire Bill, and we think the subject of such vital importance that we give it almost as verbatim, copied from Hansard.

Dr. Roddick said:—

Mr. Speaker, in moving the second reading of the Bill for the establishment of a medical council in Canada, it is my desire to be brief. My main object for framing this Bill for the establishment of a medical council in Canada is for the purpose of establishing a qualification for medical men which would be acknowledged and accepted in all parts of the Dominion of Canada. As you are doubtless aware, we have at present eight examining and licensing medical bodies in this country. Some of these are doubtless doing good work and keeping up, or at any rate assisting in keeping up, the standard of medical education, but their usefulness is limited to the territories over which they have special control. Barriers have been erected, as you are doubtless also aware, around these eight territories, so that it is practically impossible for a medical man to receive a qualification to practice in more than one of the provinces. The barriers are so marked, so strong and so high, that very few indeed have the opportunity of representing the profession of medicine in more than one province. The frontiers are so closely watched that we constantly hear of medical men being fined, and in cases where this fine has not been paid, imprisonment has been threatened for crossing a boundary river, or an imaginary line between two provinces, in order to serve and probably to save the lives of citizens of Canada. Therefore, I contend that there is reason for interference on the part of this parliament. I believe that section 91 of the British North America Act can well be evoked by this parliament in meeting cases such as I have mentioned. Section 91,

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which refers to the peace, order and good government of Canada, I contend, might well be brought into operation by this parliament in cases such as those I have cited. Such a state of affairs exists in no other country probably in the world. Even between the countries of France and Germany, I am credibly informed, a neutral territory of 15 miles has been marked out over which medical men may travel in the discharge of their professional duties so as to be able to assist the sick of either nationality. Therefore, I think it is time something was done in Canada in order to remedy so serious an evil. It may be asked why these unfortunate men who have been fined do not take steps to procure licenses in the neighbouring provinces to which they are obliged constantly to travel. The reason is that it may be absolutely impossible for a man to receive a license in more than one province. If he has begun the study of medicine in one province and if he matriculates in that province, he never can receive a license to practice in any of the other provinces. For instance, if an Ontario graduate having changed his mind as to his domicile, having passed his examinations, wishes to practice in the province of Quebec, he cannot do so for the reason that the medical board of the province of Quebec insist that he shall begin by passing the matriculation examination of that Board. Some of the ablest men in our profession to-day have been shut out from practicing in Quebec and in Ontario where they might be very useful in hospital and professorial work.

Another object which I had in framing this Bill and in bringing it before the House was to obtain reciprocity with Great Britain. That, Sir, can be done so soon as we have a central examining board for the Dominion. In 1886 the British Medical Council enacted that:—

On and after the prescribed day where a person shows to the satisfaction of the registrar of the general council that he holds some recognized colonial medical diploma or diplomas (as hereinafter defined), granted to him in a British possession to which this Act applies, and that he is of good character, and that he is by law entitled to practice medicine, surgery and midwifery in such British possession, he shall, on application to the said registrar, and on payment of such fee (not exceeding five pounds), as the general council may from time to time determine, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the medical register.

The definition states:—

The expression "British possession" means any part of His Majesty's dominions exclusive of the United Kingdom, but inclusive of the Isle of Man and the Channel Islands; and where parts of such dominions are under both a central and local legislature, all parts under one central legislature are for the purposes of this definition deemed to be one British possession.

That means that so long as the provinces are separate parts of the confederation, we cannot register in Great Britain as provinces. The British Medical Council will not undertake to look after the education of the various provinces, but I do state positively that so soon as we have a central examining board in the Dominion of Canada, the British Medical Council will at once accept the licenses from that Board and allow our men to register immediately in Great Britain, or in any part of the empire over which the British Medical Council has control. That is a very important matter. It means that we would have open to our young Canadian medical men, the army and navy of Great Britain, as well as colonial appointments, many of which are very lucrative, especially in the East and West Indies. It will also open to Canadian medical men appointments under the British Board of Trade, so that ships' surgeons may be appointed directly from this side, whereas now our young men have to go to England to first receive a license in one of the colleges of Great Britain before they can take a steamer across the Atlantic.

This indicates how unfairly our medical men are treated, but we have the remedy in our own hands, and that remedy is simply the establishment of a Dominion medical council and a central examining Board, in order to meet the requirements of the British Medical Act of 1886. We have had numerous opportunities of testing the disabilities under which Canadian medical men labour during this present South African war, and we have constantly heard of how medical men attached to Canadian battalions were not allowed to attend Tommy Atkins. It was in fact thought that they were good enough to attend Canadian soldiers, but not good enough to look after English soldiers. That is a positive fact. Several of those gentlemen who have returned from South Africa have cited instances to me, and I have correspondence bearing on it which I could produce if time would permit, showing that a great injustice had been done to our Canadian medical men, and done probably to force our hand. Knowing as I do several members of the British Medical Council, I am satisfied that nothing would give them

greater pleasure than that we should arrange in Canada here a scheme which would meet them half way.

Now, Mr. Speaker, in arranging a scheme of this kind, there is no intention, nor is there any necessity for any interference, with the autonomy of the provinces. I am aware that the fear of such interference is the great objection which has been offered to this measure. It is not intended to do away with the provincial boards in any way. They will still continue to exist as they have existed hitherto. They must exist for certain purposes. They must exist for the purpose of taxation and discipline. With the provincial boards will be left the question of taxation and all matters relating to the discipline of the profession. They will not be disturbed. Their autonomy will not be interfered with in the least degree. I believe that any interference with the autonomy of the provinces is unnecessary and uncalled for in any way. Where the provinces wish to continue an examining board, as now, they can do so. I have no doubt at all that the larger provinces, that is Ontario, Quebec, Nova Scotia and Manitoba at any rate, will each continue to have an examining board for the purpose of examining and licensing men who wish to practice in a particular province only. For instance, a man who goes up before the Ontario Medical Council, when this Act comes into force, as I hope it will, may be examined by them as he is now. They will undertake to examine him and give him a license to practice in the province of Ontario only, and he cannot go outside of the limits of that province on that certificate. It will be the same in the province of Quebec. I think that for a great many years to come the system in Quebec will continue as it is now, but I have it on good authority that the smaller provinces will probably discontinue the examining of candidates who come before them. I state without hesitation, and without any detriment to the smaller provinces, that in the light of the present progress in medicine—judging from the rapidity with which some of the subjects at any rate are progressing—it is impossible for a man, who is not a teacher connected with a university, to keep up sufficiently well to be able to examine in these subjects. Among the provinces there are four which have no university—British Columbia, New Brunswick, Prince Edward Island, and the North-west Territories; as they have as yet no teaching body, their men are not able to keep up sufficiently well to examine. On that account and for the reason I have given, there is no necessity, I repeat again, for disturbing the provincial board and its present methods; so it will continue as before.

This Bill, then, is a purely permissive Bill. It is necessary, in order that it may come into operation, to have the consent and co-operation of all the provinces. It is necessary for the medical board in each province to go before the local legislature and ask for a short clause to be tacked on to the present Act. Every province has its medical Act, and it will be simply necessary to add to that Act something like the following—though it need not be in exactly the same words:—

When there shall have been established, under the authority of the parliament of Canada, a medical register for Canada, under the control of a medical council for Canada, then, notwithstanding anything contained in any of the Acts hereby amended, any person duly registered in the said register as a medical and surgical practitioner, or as a student of medicine and surgery, shall, without any further or other evidence of qualification, be entitled to be registered in the medical register of this province as a duly qualified medical and surgical practitioner, or as a duly qualified student of medicine and surgery, as the case may be, upon production of a certificate under the hand of the registrar of the said medical council for Canada, certifying that such person is so duly registered upon satisfactory proof of the identity of such person, and upon payment of such fee as may be prescribed by the medical council of the province in that behalf.

A short amendment of that Kind, tacked on to the medical Act of each province, is all that is required to bring into effect the measure I am advocating.

Now, as to the scheme itself. How is this Act to be put into operation? It is necessary, first, to have a medical council, which may be called the Dominion Medical Council or the Medical Council of Canada, which I think would probably be a better term. The composition of this council has been a great puzzle to those of us who have had to do with the framing of this Bill. It has occasioned me, personally, a great deal of thought and consideration. We have tried two or three schemes, which have all given more or less satisfaction, but which have not quite met the requirements. When I addressed this House a year ago, I stated that the plan which seemed to satisfy all the provinces was that three members of the council should be taken from each province—one appointed by the Governor-General in Council, one elected by each provincial medical council, and, the president of each provincial medical council. That, we found, gave dissatisfaction in the larger provinces. The province of Ontario, with its 2,300 odd doctors, said, "It is unfair to us to give us the same

number only as the little province of Prince Edward Island with something like 96 doctors." Pressure was brought to bear so strongly that I looked for another scheme, and I think I have found one which will give general satisfaction. It is, that for the first 100 or fraction of 100 practitioners in each province, there shall be one member. That will let in Prince Edward Island, and will also let in the Yukon when it has a central board established. For the second 100 or fraction thereof over 50, there will be one member; and for every 600 above that, one member. That principle can be continued *ad infinitum*. Then there will be appointed members—one appointed by the Governor-in-Council from each province. There will also be university representatives, each university having a teaching medical faculty being entitled to send one, and there will be three homeopathic representatives from the entire Dominion.

Now, it may be asked: Why ask the government to appoint one from each province? I have been constantly met with the objection that this would bring politics into the organization. I do not think so. I think the ablest men in our country will be selected, very often at any rate, by wise governments for a purpose of this kind. But, Sir, there are two other reasons, cogent reasons, why the government of the country should have a voice in the composition of this council. Doubtless some day, when it gets thoroughly into operation, this body will be used by the Dominion government as an advisory body, having, as it will undoubtedly have, the best men in our country upon it, on great questions of quarantine, or concerning epidemics or pestilences that may reach our shores, in order that it may back up the authorities who are dealing with such matters in the Dominion and in the various provinces. This use is made to-day of the British Medical Council by the government of Great Britain, and its meetings and investigations have been exceedingly useful and practical. Another reason—it is a sordid one, perhaps, but one of considerable practical interest—is that having eight representatives of the government of the day upon it, this council may well come to the government and ask for some assistance, in the form of a grant for a certain number of years, which I feel satisfied my hon. friend the Minister of Finance (Hon. Mr. Fielding) will be able to arrange for us, because he has been in the past—I take this opportunity of saying—exceedingly kind to the medical profession. In 1897, when the British Association visited this country, he presented the profession in Canada the sum of \$5,000 for the purpose of entertaining their distinguished visitors.

Each university in Canada which has a teaching medical faculty will be represented by one member. There are nine such universities in Canada to-day. There are ten active teaching medical faculties, but one of these, the Trinity school, is not attached strictly to any university. We hope, however, that arrangements may be made to take that body into the composition of the council. It is possible that owing to the fact that the universities of Quebec and Montreal are practically separate and distinct, Laval might claim another representative. That will give to the province of Ontario a total of nine; to the province of Quebec eight, to Nova Scotia four, to Manitoba four, to New Brunswick three, to British Columbia three, to the North-west Territories three, and to Prince Edward Island two, making altogether thirty-six, besides three homeopathic representatives, which brings the number to thirty-nine. It may be thought that this council is too large, but we must not forget that it represents the whole Dominion. In the province of Quebec alone there are forty members on the local board, and in Toronto thirty members, so that there will be fewer in reality on this committee for the whole Dominion than there now is on the board of one single province. These figures of course will have to be constantly altered. A year ago, on the very day I addressed the House, I received a telegram from the North-west Territories, stating that there were 110 medical men there. Yesterday, I received another telegram, stating that the number had increased to 211, which, doubtless, is an evidence of the increase of population in the Territories.

The homeopathic representatives, three will be elected by the homeopathsists themselves, from ocean to ocean, by ballot. That is their own proposition.

These gentlemen will serve a certain number of years. The appointees of the Governor-General will be named for four years. Those who are elected from the profession or by the various councils will serve during the life of the council. The university representatives and the homeopathsists will be retained for four years. The whole scheme will, at the start, be under the supervision of the Minister of Agriculture, who will call the first meeting, preside at it, and arrange to have the council put into business shape. The first meeting will be held in Ottawa, and it is possible that all the meetings will be held there.

This council will elect, from time to time, an examining board, to be composed of English and French examiners, and every candidate may elect to be examined in either the English or French language. Examinations will be held in the centres where hospital facilities are the greatest and

the students most numerous, so that it will not be necessary to disturb the students. As a rule the students in this country are to be found in five different places—Halifax, Quebec, Montreal, Toronto and Winnipeg, and in these centres the examinations will be held.

It will be necessary to exact a five years' course of all students in the various universities in Canada, because that is now exacted by the Ontario Medical Council and also by the British Medical Council. The final year of the course will be purely a practical one, having to do with the practical subjects which the practitioner really deals with in his daily life.

There is in the Bill a retrospective or retroactive clause intended to admit those members of the profession who have been a number of years in practice. It is thought that every medical man who has been five or seven years in practice—the time has not been decided upon, but will be in the committee when we meet the delegates of the various provinces—should have the privilege of taking advantage of this Act. These practitioners will be registered and allowed to move from one province to another or change their domicile for the purpose of practicing, but the chances are that when a man has been anchored five or seven years in the one place he is likely to remain there, so that there will be no stampede of these gentlemen towards any of the newer provinces. By making the limit five or seven years, any danger of such a stampede will be avoided.

There will also be a board of arbitration in order to meet difficulties which may arise in the early meetings of the council. It might occur that a representative of a province might indicate that the standard was not kept up, as promised originally, and that standard must of course be at least as high as anything in existence at present. In this event, the board of arbitration will meet and be composed of three members—one to be appointed by the Governor-General from the Supreme Court of Canada, the second will be appointed by the Council; and the third will be a member of the council from the aggrieved province. These three will sit upon the case, as it were, and find out exactly where the grievance is, whether it should be considered, and what remedy should be applied. It is a very important part of the machinery, and, while I hope it will never need to be brought into operation, I think that, if it becomes necessary, it will be found useful. It was thought that a judge of the Supreme Court would not be influenced by any prejudices of a local character.

Now, the advantages in connection with this Bill are that we shall have a more uniform standard of education and examination in this country; we shall have the barriers broken down which at present exist on the frontiers of provinces, and medical men will be able to get a license to practice on both sides of the Ottawa river, on both sides of the imaginary line between any two provinces. I believe that it will lead to removing, or, at any rate, lessening the congestion which at present exists in the medical profession in some of the provinces. Medical practitioners will be more generally distributed, and it will allow a number of our young men to roam, as it were, in any part of the empire. By registering in Great Britain, as I said before, they will be able to practice in any place where the British flag flies.

We do not see the necessity of adding much to what Dr. Roddick said. If the Medical profession of Canada desires to have the right to practice in any part of the Dominion, they should render support to passing the necessary local enactment required to put the Bill into operation. If the new members of the profession, the new graduates, desire to be qualified to practice in any part of the British Empire, or, in fact, almost the wide world, let them do likewise. The important point to remember is that the British Medical Act enables men qualified to practice in any country, to be registered on the British Medical Register, provided that country will do the same for those whose names are on the British Register. This is a boon, indeed, especially when it is remembered that most of the countries or nations of the world have already reciprocated with Great Britain. It has been asked why Britain does not reciprocate with the various Provinces. The answer is clear and explicit. The British Medical Act only deals with countries. The provinces are only portions of a country, which country is Canada. In his effort to bring about a result so desirable, Dr. Roddick deserves and should receive not only the thanks, but the earnest support of the entire medical profession in the Dominion.

Book Reviews.

Abbott's Bacteriology.—A Practical Manual of Bacteriology for Students and Physicians. By A. C. Abbott, M.D., Professor of Hygiene, University of Pennsylvania. New (6th) edition, revised and enlarged. In one 12mo volume of 636 pages with 111 illustrations, of which 26 are colored. Cloth, \$2.75, net. Just ready. Lea Brothers & Co., Publishers, Philadelphia and New York.

The past three years have been productive of rich results in bacteriological study, and the new edition of Dr. Abbott's excellent manual appears opportunely.

Among other matters of great and practical interest which the volume includes are the recent findings regarding the causation of cerebro-spinal meningitis and dysentery; the lately revived investigations in tuberculosis, and the discovery of the new group of micro-organisms, which appear to be so closely allied to the bacillus tuberculosis; the very considerable additions that have been made to our knowledge of the mechanism of infection and immunity, etc.

Dr. Abbott's work has had a very successful life. Six editions, each larger than its predecessor, in ten years, is a record reached by few medical books. This rapid and increasing demand offers frequent opportunities for revision, and each of these six editions presents not only a complete renewal, but a considerable enlargement, so that the volume now is nearly three times its original size.

That Abbott's Bacteriology is an accepted authority and a strong favorite with both student and instructor is not at all surprising.

PUBLISHERS DEPARTMENT.

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A. D. H. KEMPER, M.D.

Sedgwick, Kans.

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CONDITIONS OF THE GENITO-URINARY ORGANS.

This is to certify that I have used Sanmetto for the past eight years, and I can truthfully say that it has come to my aid in my practice, in such cases that I deemed was necessary, such as enuresis, catarrhal trouble and atonic conditions of the genito-urinary organs. In every case where I have used it faithfully it has proved to be all claimed for it—a potential remedy. I have taken it myself. As I am over seventy years of age, it has come to my rescue, and the relief is phenomenal. I have practised medicine over thirty years in Cincinnati.

WESLEY H. WATSON, M.D.

Cincinnati, O.

CANADA MEDICAL RECORD

JULY, 1902.

Original Communications.

THE OBSTETRICAL FORCEPS.

BY A. LAPHORN SMITH, B.A., M.D., M.R.C.S., ENG.

Professor of Clinical Gynaecology in Bishop's University, Montreal; Professor of Surgical Diseases of Women in the University of Vermont, Burlington.

When first requested by the editor to contribute an article on the obstetrical forceps, the writer was about to reply that he was not a teacher of obstetrics and that he had only used the forceps about two hundred times, including consultation cases, and, consequently, that there were many others who were much more able to write on this subject than he; but on thinking over his own experience, especially as a gynecologist who has taken the histories of a great many women who have been injured by the forceps and who has repaired these injuries, he came to the conclusion that he might do some good by giving his experience of the abuse of the forceps as well as by expressing his views as to when and how they should be used. No attempt, therefore, will be made to write a classical or library article, and no books will be referred to or quoted; the opinions he will express are based on about twelve hundred and fifty obstetrical and seven thousand gynecological cases, which, of course, is a very small number when compared with the vast aggregate of cases which might be drawn upon for information. And yet the careful consideration of even these few cases may be of value to the younger and less experienced of our readers to whom it is especially addressed, while the older ones may take some interest in approving or condemning it in the light of their much greater knowledge of the subject.

The Use of the Forceps. If any general practitioner of mature years were asked which of the many instruments in his possession he could least afford to do without, he would, on looking around his various shelves and bags, finally rest his eyes on his long black bag and, almost affectionately reply, the forceps, as he thinks of the many lives and the amount of suffering it has enabled him to save. But it cannot be denied that the forceps is an agent which is as potent for evil as for good, according to the motives which prompt its employment and the skill with which it is employed. The forceps has saved the lives of hundreds of mothers, but it has shipwrecked the lives of thousands. And while it has saved the lives of thousands of children who would have perished from prolonged compression in a narrow pelvis, it has killed a great many who would have passed safely through if they had been allowed a little more time. The object of this paper will be to point out how the forceps may be made to accomplish the maximum of good with the minimum of harm. There are a few simple rules which the writer has laid down for his own guidance, and which he has often pointed out to his students at his gynecological clinics when examining severe lacerations of the cervix, vagina and perineum.

1. Never use the forceps until the woman has been twenty-four hours in labour if a first confinement, or twelve hours if a second or subsequent one, unless there is some urgent indication to do so.

2. Never use the forceps to save one's own time.

If these two rules were invariably followed there would be a tremendous falling off in the number of women with lacerated cervixes and perineums, and consequent puerperal infections and uterine displacements. In taking the histories of nearly four thousand cases at the Montreal Dispensary I have learned that a great many women, who stated that they had never been well since their first confinement, were delivered with the forceps in from one to six hours after the first pain of their first labour. The following extreme cases appears among the histories: A woman who came with a laceration through the perineum and sphincter ani and about two inches up

the bowel, as well as having a star-shaped laceration of the cervix and bands of scar tissue running across the vagina in every direction, stated that she had the first pain of her first confinement at eleven p.m., while spending the evening at her father's house, which necessitated her going home. She walked thither a distance of half a mile and as she and her husband had to pass the door of the physician who was to attend her, the unlucky idea occurred to them to stop at the doctor's and let him know that labour had begun. Instead of telling them to go home and go to bed, and that he would call around in the morning, he unfortunately got up and dressed and arrived at her house before twelve. By midnight he had put her to bed, examined her and decided to apply the forceps forthwith. During the next four hours, she said, he applied the forceps thirty times, although, as he did not use any anesthetics, she was unconscious most of the time from fainting, but her husband told her that several times the doctor fell on his back on the floor owing to the instrument slipping off the child's head. At last at four o'clock in the morning he told the husband that he could do no more as he was exhausted, and that he had better get another doctor. Dr. Gaherty, who sent the patient to me afterwards, then took charge of the case and found her in a very dangerous condition. By eight o'clock he had revived her enough to give her an anesthetic and terminate the delivery with instruments. This, of course, was an extreme case, but there were many other women who stated that the instrument was applied in two or three hours after the first pain. The majority had been attended by a physician whose fee was cut down so low that it was impossible for him to devote the necessary time to the case and yet make an honourable living.

I am almost ashamed to mention such a thing in a paper on the abuse of the forceps, but it must be truthful in order to be of any use, and so I must say that there are many women and still more children lying dead and buried to-day who would have been alive and well if the physician had demanded and been paid a sufficient sum to remunerate him for the time which should have been spent in

order to do good work. Rather than reduce our service to the level of an absurdly small fee, would it not be better to educate our patients up to the level of paying a reasonable fee, if they can afford it, or attend them for nothing at a maternity hospital, if they are poor? The forceps, of course, will not be employed too soon in such a place, either to save the medical director's time or to give practice to the medical student. I have made it a rule not to attend a woman in her confinement unless she has engaged me several months beforehand, among the many reasons for this being the importance of seeing her a few times in order to instruct her on the time required for a safe delivery. The writer has saved himself much annoyance and his patients much danger by the following method of *avoiding the use of the forceps too soon*. Each primipara is given three one-grain opium powders, one to be taken every hour as soon as the pains begin, and if the pains begin in the night she is told not to awake her husband until the usual hour in the morning, nor let the doctor know until 9 a.m., as it is most important that her first confinement should take at least twenty-four hours if possible. Then she is told the reason why; that if she has a natural confinement she will have better health than ever, while if it is hurried artificially she may become a chronic invalid for life. The result is that, supposing she is taken with her first pain at 11 p.m., she takes her powder and perhaps goes off to sleep only waking for a minute at long intervals; she may not even have to take the three powders. In the morning she takes an enema and a bath, puts on clean clothes, has her breakfast and then sends me word. I make my first visit about 10 a.m. and after sterilizing my hands I make the first examination and find perhaps that the os is opened to the size of a quarter-dollar. I tell her that everything is going on well and that the baby will probably be born before midnight. She is told to busy herself with her household duties between her pains, and that I will return again in the afternoon. On no account should the doctor remain in the house all day, for if he does he will almost surely be urged to do something which his judgment tells him would be detri-

mental to the patient's welfare. At the afternoon examination the os will perhaps be dilated as large as the palm, and at the evening visit the head will probably be entering the pelvis and I then remain if I have no other visits to make. But even then I do not remain all the time in the sick room, nor do I make any more examinations, but I order the nurse to call me only when she sees the head showing a little at the vulva. A little bottle with a sprinkler on it, filled with a. c. e. mixture (alcohol one, chloroform two, and ether three parts) may safely be handed to the patient, with a cone made with brown paper and a towel, and she may take a whiff of this whenever a pain comes on if it is strong; just before the head comes through the vulva I take the cone and bottle from her and put her quite asleep for a few minutes. When the confinement is managed in this way the forceps will be used very rarely. It has been mentioned above that three examinations should be made; but if the physician sees any way in which one or two of them can be avoided, let him do so, *for the woman's safety increases with the fewness of the digital examinations.* If none at all were made, puerperal sepsis would be almost unknown. So much importance should be attached to this that the writer tells the woman when she engages him not to allow any one but him to examine her, and not even him more than two or three times.

It is well also to warn the patient that we are going to make as few examinations as possible *for her sake*, in order to circumvent the machinations of the old women who call us in to make an examination every time the patient has a pain. After the lapse of so many years it is amusing to look back upon the scenes of one's early confinements, although at the time they were tragic enough; as one entered the darkened and ill-smelling rooms one felt like an innocent man on trial for his life by a jury which has already made up its mind to convict him, when through the gloom we saw the pessimistic faces of the six old women with tea-tanned faces who were there for no other purpose than to sit in judgment on the young doctor. What a howl of condemnation they set up when after

an examination he announces that he is going home, as the labour has just begun. More than once the writer has weakly stayed only to be harassed and tormented for twelve weary hours by the disparaging remarks of the jury, such as, "Can you do nothing for her?" or, "Hadn't you better call a more experienced doctor?" until weary and goaded to desperation he has committed the almost unpardonable crime of applying the forceps in the very middle of a normal labour. Many a time the blame for using the forceps too early and thereby wrecking the woman's life should be laid at the door of these old women, rather than at that of the young physician.

Are the injuries to the mother due to the use of the forceps, or to the abuse of it? The fact that, in my own experience at least, I caused more damage with the forceps in my earlier years than I do now, would make me believe that much of the terrible injury which the forceps inflicts is due to the too early and too violent use of it. I once saw a practitioner apply the forceps early in labour, and, bracing his two feet against the woman's buttocks, he extracted the child by sheer force. During the last ten years I have caused very little damage with the forceps. In fact, when properly used, the forceps not only does not cause lacerations of the perineum, but actually saves the perineum by taking the weight of the head off it as the handles are raised, and guiding the head forwards and upwards instead of leaving it to obey the forces which are driving it down upon the perineum.

When to remove the forceps? As the forceps, no matter how delicate in structure it may be, must take up some room, I think it is best to remove it before the longest diameter of the head comes through the vulva. As soon, therefore, as I am sure that the upper jaw of the child can be reached by the right finger in the rectum, the screw holding the blades together is unloosened with the left hand, and first the female and then the male blade is removed, the right finger in the rectum all the time keeping the head down on the perineum. When the next pain comes, the head is pushed forward under the arch of the pubis and it is thus born without the perineum

being torn. When the rectum has been washed out by a soap and water enema there is nothing unpleasant about putting the fingers in it; but the enema is of advantage for another reason, namely, the saving both patient and attendant the mortification of having the bowels moved in the bed as the head comes down.

No force should be employed in applying the forceps. While studying in London twenty-five years ago, the writer received a lasting impression by reading the report of the trial of a doctor for malpractice, who, while partially intoxicated, forced a blade of the instrument through the vagina into the peritoneal cavity, and then, when several feet of small intestine prolapsed, he cut the latter off thinking that it was the cord. Whenever I am introducing the forceps this case comes to my mind and I am extremely careful not to use any force; if I cannot get it on without force I will not use the instrument at all. In fact, in most of the cases the blades drop in by their own weight.

How to apply the forceps. Although I have often seen them applied, while I was in England, while the patient was in the left lateral position, I think there is no comparison between that and the dorsal or lithotomy position, with the hips well over the edge of the bed and the feet on two chairs, or, better still, held by a leg holder, or failing that, by two women. I never attempt to apply the forceps while the woman is in the bed and lying on her back. The male blade is taken between the thumb and finger of the left hand and allowed to hang vertical, while two fingers of the right hand guide it between the head and cervix, when the handle is allowed to fall a half a circle, and the blade will be above the brain. The hands are again quickly washed and the same thing done with the female blade, only in different hands. When the two handles have fallen or are depressed a good half circle the locks will come together and the screw is tightened. The blades are then applied transversely to the mother's pelvis where there is most room, but as the child's head has to rotate forwards in the pelvis I sometimes take the forceps off when I get the head in the pelvis and re-apply them to the sides of the child's head before beginning to raise the handles.

Choice of instruments. Having in my earlier years of practice called several senior practitioners to my assistance in difficult cases, and having in turn been called by a great many younger men since, I have had opportunities of comparing the various makes of forceps, and so far as I am personally concerned, if I had to buy a new pair now I would choose the same pattern as those I bought a quarter of a century ago and have used constantly ever since, namely the Baudeloque. (I have several other kinds, but keep them merely as curiosities.) This instrument is a foot and a half long and a pound and a half in weight. The handles are roughened and each has a hook on it, which, with the rough handles, is a great help when traction is required, although I seldom use the forceps in this way, preferring as much as possible to employ it as a lever, with the arch of the pubis as the fulcrum; the long handles enabling one to exert sufficient force in this way with only one or two fingers of one hand on the instrument. One might fear that this would injure the soft parts covering the pubic bones, but such has never happened in my hands. In many cases, when the head was arrested in the pelvis, I have been able to deliver without applying a single ounce of traction. Laying the handles on the open palm of my hand, I have raised them until they touched the woman's abdomen, describing exactly half a circle, by which time the head had passed the vulva. But it is in cases where there is a narrow pelvis, with the head arrested at the brim, and the uterus is lashed into an ineffectual fury by the pains, threatening every moment to rupture itself, that I have found these forceps so useful. When they are applied in these cases, we must pull downwards until the head enters the pelvis, and after every pull wait a moment to see in what direction the handles point before making the next pull, when they will be found each time to point a few degrees of a circle higher up. These forceps have this great advantage, that they will do equally well in the most difficult and in the easiest cases. One woman I remember, who had had two confinements, each time requiring the assistance of three doctors and the child having to be killed both times. She came to me

for her third delivery, and as she was anxious to have a living child, I advised symphysiotomy, to which she consented. As soon as labour set in she entered my private hospital and all preparations were made to operate, but before cutting the pubic arch I made one attempt to deliver by applying the forceps high up. This was easily done, the male blade catching the child's forehead and the other the occiput. It was the projecting promontory of the sacrum which held the head back, but on applying some considerable traction downwards I felt a clicking sound as though the right parietal bone had bent or cracked, and the head came down. On raising the handles delivery was easily effected without any injury to the mother and with a living child which the parents so much desired. I looked for a fracture of the parietal bone, but there was no sign of it; it may have been elastic enough to bend without breaking. I attribute my success in this case entirely to the long forceps.

Care of the forceps. This same pair of forceps has been in use for nearly a quarter of a century, but it has been well taken care of. I have never once entrusted it to any one else to clean for me, but immediately the child has been born I have returned it to the jug of hot water from which I had taken it, and as soon as the mother and child had been cared for I have washed and dried the forceps myself, finishing the drying by sterilizing it on the hot stove. Every few years they are re-silver-plated, and now they are as good as the day they were bought.

Danger of using the forceps when there are no uterine contractions. I have already mentioned the danger of using the forceps to terminate labour when labour has either not begun or is only half over, from the point of view of lacerations of the cervix, vagina and perineum, but I wish to say a few words about inversion of the uterus from this cause. I have noticed that this terrible accident is more common in the practice of those energetic but misguided gentlemen who convert their normal labours into *accouchements forces* in most of the cases in which the child is not borne before they reach the house. Either there is uterine inertia, and they have to apply the forceps for

this reason, or else there is retained placenta, and they have to introduce their hand and arm as far as the elbow to remove it. Now it is absolutely and mechanically impossible for the uterus to contract itself inside out. If it is inverted, it is because it has been pulled inside out by some one; and the only two people who can do that are the baby and the accoucheur; neither of them can do it except in one way, and that is through the cord. And not even then, unless while the uterus is relaxed between the pains. Sometimes it is unavoidable because the cord is abnormally short, or it is twisted around the child's neck several times so that it becomes abnormally short, and as the child drops out of the vulva the fundus is pulled down with the placenta as soon as the uterus relaxes. Or the fundus is pulled down during an interval between pains by tractions on the cord while delivering the placenta. But when the forceps is used in the total absence of contractions there is absolutely no reason why the uterus should not invert every time. I was telegraphed for to come to the country to help a medical friend, where, the forceps having been applied in the absence of pains, the child was immediately followed by the placenta still attached to the fundus. Before I could get there the woman was dead from hemorrhage and shock. In this case the cord was wound three times around the child's neck, and before it could be undone the uterus was inverted.

Injury to the child's head. There is no doubt that many children have been killed and many others maimed for life from injuries to the head caused by using undue force with the forceps. But all these deaths must not be charged to the forceps alone; many of these children would have perished as well as their mothers had delivery not been terminated by their aid. In the writer's own hands, out of over twelve hundred deliveries, about twelve children; or one per cent., have died from instrumental deliveries, but he has only seen one case of severe injury to the brain among those who survived. This was a large boy, whose mother had a generally small pelvis, and after waiting twenty-four hours the forceps was applied at the

superior strait and the child delivered with great difficulty. Just over the right parietal bone a hole was found through which about a teaspoonful of brain substance exuded. The wound was carefully treated and, instead of the child dying as was expected, it made a good recovery. This case was followed up with interest until the child was five years old, when he disappeared from view, but when last seen he had a small pulsating tumour at the spot referred to as large as a quarter of a dollar, but he was not paralyzed in any way. I have heard of several cases in Montreal where idiocy, imbecility, paralysis and convulsions have resulted from forceps injuries to the brain.

There are many other things about this instrument which I would like to say, but the space at my disposal is limited and I must bring my paper to a close, with the hope that what I have said may induce many young practitioners to give nature a fair chance before resorting to the forceps.—*Philadelphia Medical Journal*.

ERGAPIOL (SMITH), IN DISEASES OF THE FEMALE.

BY CHARLES H. SHEPARD, M.D.,

Physician to Lincoln Hospital, Durham, N.C.

A deep and general interest is attached to all knowledge pertaining to the treatment of common diseases of the uterus, to which women are subject, and a vast literature is the outcome of this profound and focussed interest. We live to-day in an age of transition—a period of change. A great many of the former theories in medicine are fast passing away. New medicines are made, achieve a short-lived success, and then pass on to obscurity. This is true most especially in medicines for gynæcological diseases. Of the newer remedies it is hard indeed to get one that may be depended upon for long. They soon lose their reputation and potency and are relegated to the past.

We know that all diseases of the womb have not the same etiology nor the same pathology, therefore they should not all have the same treatment. Far too often the general

practitioner groups all these diseases together as one and gives the routine treatment. It is not enough to give anodyne medicines for dysmenorrhea no more than it is sufficient to treat alike all forms of dysmenorrhea.

The operation of curettement has a most important place in these conditions, but like other remedial agencies it has its limitation. When we curette the uterus we rid it of a pathologically obnoxious lining membrane, and afford a normal membrane the opportunity to be formed.

The healthy woman with normal genitalia menstruates regularly and painlessly once a month from puberty to the "turn" of life, except that this regularity is interrupted by pregnancy and afterwards by lactation. Any departure from this rule constitutes an abnormality. Amenorrhea is less frequently met with than dysmenorrhea and irregular menstruation. The present age of transition has brought forth what is popularly known as the "new woman," and she has brought with her new ideas and practices which in very many cases retard growth and the natural process necessary for perfect health. For leaving the old landmarks, she has to suffer.

The most generally useful medicine in the conditions of amenorrhea, dysmenorrhea, irregular, scanty and fetid menstruation in my judgment, is a preparation of the Martin H. Smith Company, of New York, known as Ergoapiol (Smith). In the female ward of the Lincoln Hospital, Durham, N.C., I have used this medicine very extensively, and it has not only never failed to benefit and cure, but I know no remedy with which I could replace it were I deprived of it. Its efficacy may be tested by any physician who properly tries it. I mention a few cases with short description of each, in which it has given the most signal benefit in my hands.

Ergoapiol (Smith) is put up as a small capsule, and is made up of a special form of apiol, which is of the the very highest quality. Combined with this are some other most valuable hemagogues, and they all go to make a fine preparation. It seems to be a scientific pharmaceutical preparation, non-

toxic, tonic, as well as emmenagogue. What I have to say of this preparation is based entirely on clinical experience, and I feel safe in saying that it will bear a clinical test whenever properly administered.

REPORT OF CASES.

No. 1. Mrs. F. was admitted to hospital September 15, 1901; married; no children, though she had been married four years. Had not menstruated for seven years. Womb had been curretted several times; suffered from leucorrhea; pains in right and left iliac regions continuous. Examination showed a very small os, but generative organs were otherwise found to be normal. Another curettement failed to bring on the menses. I then prescribed Ergoapiol (Smith), to be taken one capsule three times a day, and afterwards increased to one capsule four times a day. After seven days of this treatment she complained of a general feeling of stiffness in her limbs, gaping and a feeling of malaise. The following morning she found, to her delightful surprise, that she was menstruating for the first time in seven years. At that time the flow was somewhat scanty, but the treatment was continued through three periods. Each succeeding period was more nearly normal than the one that preceded it. Now her functions are regular, and I know no reason why she may not become pregnant.

Case No. 2. Mrs. S. complained of a continuous, dull, dragging pain, situated in the region of the iliac fossa of the right side. Menstruation irregular, scanty, fetid. Married six years; had never been pregnant. Excessive leucorrhea, though otherwise she was perfectly normal. Her weight was 140 pounds. Her condition and the suffering, both physical and mental, which it occasioned her, was rapidly undermining her health. She was becoming emaciated, appetite of no consequence, general weakness. She considered her condition "hopeless." Cardiac weakness, of which she was a victim, contra-indicated curettement—which usually cures "whites," and allows the formation of a healthy lining membrane. Ergoapiol (Smith) was prescribed for her, one

capsule three times a day. In conjunction with this I gave tonic medicines. After six weeks' use of this remedy the woman said she was "feeling so good" that she did not need any further treatment. She had increased in weight, and her appetite had become all she could wish. The menstrual flow was increased, and now, five periods having elapsed from the time treatment was instituted, her monthly flow has failed to appear. She does not expect its return for some time—supposing herself pregnant.

No. 3. Miss S. suffered severe pain each month, beginning a day before the flow came on. The flow was a thick, clotted mass, consisting of membrane and the menstrual blood matted together. She had suffered from puberty, and the suffering became more intense as the years passed on. She was 19 years of age, stout, of healthy parentage. Admitted to Lincoln Hospital, January 15, 1902. She declined an operation. I afterwards prescribed Ergoapiol (Smith), and have continued it for one month. Her next menstruation was free and easy; painless and regular. I doubt not that keeping up this treatment to another period she will be entirely rid of the hitherto troublesome condition.

No. 4. Miss W., tubercular history. Menstruation very irregular, sometimes three, sometimes five weeks between periods; very painful; scanty. I prescribed Ergoapiol (Smith), one capsule four times a day beginning one week before the menstrual period and continued a week after the period. As a result of this treatment the patient feels a great deal better in her general health; her monthly flow has been rendered painless and increased in quantity. Ergoapiol has a tonic action upon the muscular fibres of the womb. Its effect is not transitory but lasting. This superior preparation is decidedly tonic.

No. 5. Mrs. D., a victim of endometritis. Pain continues between periods and is aggravated at periods. Leucorrhoea was very pronounced; pains in the back; "hot flushes"; vertigo, headache. Patient would not allow an

operation; highly sensitive. Several preparations were tried, but none gave relief until Ergoapiol (Smith) was used. It has entirely relieved the patient, and she is now loudly singing its praises. In this case treatment was kept up for ten weeks.

Case No. 6. Mrs. D., widow, aged 33, had three children; youngest 10 years of age. She had suffered all her menstrual life severe pains in the pelvis at each period; had to keep in bed a week or more each month; paroxysms of pain were followed by a flow of the "whites"; no anæmia; womb found to be flabby and relaxed; pains extended down thighs posteriorly. Had been treated for many years by various physicians of note, but had received only temporary benefit.

Ergoapiol (Smith) was given her, one capsule three times day, and increased at the time of the flow to four a day. After three months of this treatment her menstrual function became regular, and, being entirely well now, she feels that life, after all, is worth living.

Ergoapiol has never failed in my hands. It is not possible that it can cure obstructive dysmenorrhea, but with that exception it is indicated in all the other diseases of the womb where a tonic and sedative action is the requirement.

I could prolong this list indefinitely with records of cases that have been entirely relieved of these conditions, and I shall be pleased to furnish any information desired as to Ergoapiol (Smith) and its use.

Durham, N.C.

Selected Articles.

RECURRENT MALIGNANT DISEASE OF TESTICLE.

BY A. CARTER WEBBER, M.D., CAMBRIDGE, MASS.

Mr. D., an active, energetic business man, married, robust and florid, had been in good health, except for an eczema on the hands and legs, previous to the summer of 1894. At that time he noticed an enlargement of the left

testicle which steadily increased, without pain or tenderness. When he came under my observation, October 3, 1894, the enlargement of the organ was about the size of a large goose egg. It was hard, firm, smooth, non-elastic, free from adhesions to the scrotal tissues, having none of the feel of the testicle on the right side. There were no indications of inflammation, such as pain, tenderness or heat. The cord was somewhat thickened, but otherwise normal. The epididymis seemed fused to the testis; the inguinal glands were not enlarged.

In spite of active treatment the testicle continued to increase in size and was removed November 7, 1894. A section of the organ displayed the usual macroscopic appearance of malignant disease—cutting crisply, slightly concave surfaces, pearly white, no defined edge, yielding a creamy fluid on pressure. One or two small cysts containing serum were found. No microscopic examination was made. Under antiseptic treatment the wound healed without difficulty, and the patient soon returned to his business and continued in good condition until the autumn of 1900, when he had a recurrence of his old trouble on the right side, the other testicle becoming affected.

In November, 1900, he came under my care and treatment. At that time the testis was three times as large as normal, but was free from pain or tenderness. It was solid, smooth, inelastic, and gave him no inconvenience except from its size and a dragging down sensation. He reported that the functions of the organ were somewhat impaired. He was then 50 years old. No improvement resulting from my treatment, the cord being somewhat thickened and the inguinal glands considerably enlarged, I began to resort to the use of the Alexander fluid, 5 minims every second day, injected directly into the external surface of the testicle which was not adherent to the tissues of the scrotum. This was continued for six weeks, when a very decided improvement in the size and feel of the testicle and cord was apparent. The hypodermic injections were then made every four or five days until April 13, when the organ was reduced to the usual size, and felt like a normal testicle. The thickening of the cord and the enlargement of the inguinal glands had disappeared.

As a precaution he receives treatment once in three or four weeks, but says he feels like himself again.—*International Journal of Surgery.*

A NEW AND EFFICIENT REMEDY FOR MALIGNANT GROWTHS.

BY J. G. JUSTIN, M.D., PH.D.

Fellow of the Monroe Co. Medical Society, New York.

The recent report of Professor Gaylord to the State authorities at Albany, N. Y., embodying the results of his researches into the cause of malignant tumours, has aroused widespread interest and started a train of investigation which is certain to add greatly to our knowledge of the disease.

Leaving the distinguished professor to prove his discovery and trace out the life history of the interesting parasite, if parasite it be, that from time immemorial has played such havoc with human anatomy, permit me to call the attention of the profession to what I conceive to be a far more important discovery than the cause of malignant tumours, namely, an efficient remedy for their relief, a remedy capable of lessening the mortality from this dreadful malady, and as potent in cancerous affections as the anti-toxin serum is in diphtheria.

Although the attention of the profession was called to the new agent over a year ago by its discoverer, Dr. A. C. Alexander, who submitted ample evidence of its value, it has failed to attract the notice it deserves, and so far as I can determine I am the only practitioner in Central New York who has made anything like a systematic trial of its virtues.

My own experience with the "Alexander remedy" for malignant growths extends over a period of nine months; and the results have been so remarkable as, in my judgment, to justify the claims made for it by its discoverer and to remove any lingering doubt, in my own mind, that it possesses a marked curative value in cancer.

As a preliminary to a test of the new remedy I made a visit to the Alexander Sanitarium, where I became conversant with Dr. Alexander's methods and witnessed the daily treatment of a variety of malignant tumours.

On my return to Rochester one of the first cancer patients to come under my care was a man with a recurrent epithelioma of the nose and face far advanced.

The history of this case is as follows: Two years ago the disease began as a small ulceration on the mucous membrane of the right cheek, opposite the second molar tooth, and gradually extended until it involved the gums and alveolar process of the lower jaw. At this stage his physician advised an operation, which was performed at the

Homœopathic Hospital, the whole of the alveolar process, together with the diseased tissue on the right side, being removed. He made a good recovery and for a time believed himself cured. Some months later, however, the disease appeared in the nose and extended rapidly to the adjacent tissues.

He was now prevailed upon to try a celebrated cancer doctor in Rochester, who claimed to have a wonderful paste that would only attack cancerous tissue. Two applications destroyed about one-third of his nose, resulting in such disfigurement that he declined further treatment.

When he presented himself to me he was a most discouraging-looking subject. The right ala of the nose was entirely gone, and a portion of the upper lip, on the right side, had sloughed away; the septum was destroyed, and the whole interior of the nose, back to and including the turbinated bones, was an ulcerated, sloughing mass, foul and offensive. His face, nose and upper lip were the colour of raw beef, and his general condition was so bad that he had given up his occupation.

I was unable to give him much encouragement, but advised the trial of the Alexander remedy for a couple of weeks and to be guided by the result. I began his treatment by the hypodermic injection of ten minims of the fluid into the cellular tissue of the abdomen for its systemic effect, four minims into the diseased area of each cheek, and four injections of two minims each around the border of the triangular opening into the side of the nose. The dosage in the abdomen was increased five minims each day until the maximum dose of thirty minims was reached, after which the latter dose was administered every other day. The diseased tissues of the nose, lip and cheeks were injected every fourth day, using from two to four minims according to situation, and giving not more than four injections at each sitting. The ethyl chloride spray was used to prevent pain from the introduction of the needle, and no constitutional or local disturbance of any moment resulted, the fluid being readily and quickly absorbed. The interior of the nose, after being cleansed of the secretions, was washed with hydrogen dioxide and sprayed with the Alexander fluid.

The result of this treatment persisted in for twelve weeks has been the apparent arrest of the disease. The patient has gained thirteen pounds in weight, has a good appetite, is strong and has resumed work. There is now

comparatively little discharge from the nose, and it is no longer offensive. The skin covering the face, nose and upper lip has lost its red infiltrated appearance, and where there was a loss of substance there is now a distinct restitution of tissue.

When this patient came to me he was past surgical aid, the caustic treatment had failed to ameliorate his condition, and we must, therefore, conclude that his improvement is due to the Alexander remedy.

Mr. S., aged fifty-five years; mother died of cancer of the liver, and father of cancer of the throat. This patient was referred to me for treatment by Dr. F. O. Webber, of Boston, who diagnosed his disease primary epithelioma of the tongue. Examination showed a papillary growth about the size of a silver three-cent piece, with a hardened base, situated on the anterior third of the tongue to the left of the raphé. On either side of the growth and slightly in advance of the same were two small indurated patches of a lighter colour than the surrounding tissue.

The treatment of this case was as follows: Four minims of the Alexander fluid was injected into the tongue, just outside the growth, the needle being inserted at an angle of forty-five degrees and directed toward the centre of its base and penetrating well below the tumour. Ten minims were injected into the cellular tissue of the abdomen for its systemic effect. The injections into the tongue were made every fourth day, as described, until the cancer was encircled by ten injections. The fluid was administered in the abdomen ever other day. Following the tenth injection into the tongue, the tumour sloughed out entire, leaving a healthy looking wound, which in ten days had healed perfectly, leaving no trace of the site of the growth. The case is still under observation, but, as yet, there is no indication of further trouble.

Other cases of cancer under my care are progressing favourably, but are not far enough advanced in treatment to enable me to report them.

The remedy is said by its discoverer to be a solution of a new organic compound formed by a union of hydrocarbons and a dimethyl ketone, to which are added essential oils, forming a solution represented by the formula $C_{27}H_{17}O_2$.

It is a clear, almost colourless fluid, with a strong aromatic odour.

But be the formula what it may, the agent has a marked specific action on cancerous disease, both local and constitutional. No deleterious effects result from its introduction into the cellular tissue, the only care required being to avoid puncturing of important nerves and blood-vessels.

Used hypodermically, in an area infiltrated with cancer cells, the fluid works a prompt transformation, the part becomes paler and less vascular and if broken down is followed by reparative action.

Cancerous tumors, as a rule, are distinguished by great vascularity and a rapid growth. They are composed, generally speaking, of a stroma enclosing the tissue elements of an embryonic type which possess feeble vitality, being prone to undergo retrograde changes leading to ulceration and gangrene.

What is the explanation of the curative action of the Alexander remedy? In what way does it arrest the growth of malignant tumours?

It has seemed to me that it does this in the first instance by lessening their vascular supply, and in the second by a vitalizing influence on the cells themselves, or, possibly, by destroying some parasitic form of life that is responsible for the morbid phenomena. At any rate, the use of the remedy in cases where the system retains sufficient vitality to respond to the treatment is attended by a marked improvement in the condition of the patient, both local and general.

Whereas, a few months ago, I dreaded to encounter the sufferers from this disease, knowing that the resources of the healing art were powerless to afford relief, I now undertake their treatment confident of ameliorating their condition, and in cases where there is not too great loss of vitality, of effecting a cure.

In closing this report of my experience with the Alexander remedy, I am aware that my series of cases is too small to base deductions upon, but the results obtained have not been duplicated by any other known method of treatment, and they supplement a large number of cases reported by Dr. F. O. Webber, of Boston.

In view of the above I cannot too strongly commend this remedy to the attention of brother practitioners.—*New York Medical Times*, Sept., 1901.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

CAMPHOR DRESSING FOR VARICOSE ULCERS.

Camphor is a drug which for many years was held in great esteem, especially in extra-professional circles; indeed, the late M. Raspail founded a school of therapeutics which still rejoices in great popularity in France, based on the use of camphor internally and externally as a curative agent. Its anti-spasmodic properties, though well authenticated, have of late fallen into disrepute, or at any rate into disuse, and externally it is only employed in this country in the form of a liniment of which it is but a subsidiary constituent. Two German physicians have recently called attention to the value of camphor dressings in promoting the cicatrization of varicose ulcers of the legs which are notoriously refractory to treatment. They make use of an ointment containing 2 per cent. of camphor, with from fifteen to twenty parts of oxide of zinc, or, if this be found too irritating, they prescribe a mixture of two parts of camphor with forty parts of zinc oxide, and fifty parts of olive oil. An alternative application is a solution of the drug in spirit, but this must only be applied after the ulcerated surface has been thoroughly cleaned of scabs and crusts by poultices. It is asserted that under this treatment the most obstinate ulcer will cicatrize within three weeks, which is more than is claimed for the much lauded oxygen treatment, over which, moreover, it has the advantage of being more generally applicable at a vastly smaller cost.—*The Medical Press*.

HOME-TREATMENT OF PULMONARY TUBERCULOSIS.

Dr. Robert H. Babcock, in discussing this subject, believes that the real reason for the hopelessness on the part of the practitioner in obtaining satisfactory results in the home-treatment of tuberculosis lies in the fact that he depended too much on medicinal therapy. The most success-

ful treatment lies, not in the use of medicinal agencies, but in the hygiene of the patient's life. Although these requirements can be best secured in a sanatorium, they can be obtained at the patient's home regardless of the climatic conditions that prevail there. Food should be taken at short intervals; it should be easily digested and assimilated, and should be of the most nutritious character in the smallest bulk. Good results are obtained from the use of milk and raw eggs. The patient is ordered to drink a glass of heated but not boiled milk the first thing after waking in the morning, and thereafter every two hours during the day, regardless of his meals. Raw eggs are taken, beginning with one after each meal, and increasing by one daily until as many as possible are consumed. Exercise is to be permitted only when the patient is free from fever and a febrile reaction does not follow exercise. The patient should spend the entire day out of doors, without regard to the condition of the weather, proper precautions being taken to prevent the patient from taking cold. Hydrotherapy is highly important. The one essential condition is that all measures should be followed by a good reaction.—*Medical News*.

REMOVAL OF EAR-WAX.

Baerens (Regular Medical Visitor) says that in the removal of impacted cerumen as little instrumentation as possible should be indulged in. Much harm often follows the use of probes, forceps and hooks in untrained hands. Hardened wax may be softened by the instillation of a solution of sodium bicarbonate and glycerine and water, three times a day. In syringing the stream should be directed along the upper wall of the canal, the object being to force the water behind the plug, and not against it. If much force is used vertigo often results.

TONSILLITIS.

Dr. J. T. Crowley, of San Francisco, Cal., writes to the *Medical World* that the following combination seems to be well-nigh a specific, a rheumatic tendency being present in most cases:—

R _y Sodii salicylatis.....	1 ½ drachms.
Ferrous sulphate.....	½ drachm.
Liq. ammon. acet.....	1 ½ ounces.
Syr. Tolu.....	q. s. ad 3 ounces.

M. Sig: Teaspoonful three times a day in water or milk.

A REMEDY FOR NOSE-BLEED.

Children are occasionally troubled with bleeding at the nose, and in some instances this becomes quite alarming, especially when all known remedies fail, and the weakening flow still continues; and in this instance, as in many others, the best remedy is one of the simplest that could be tried. A celebrated physician has claimed in one of his lectures that this "best remedy" is a vigorous motion of the jaws, as in the act of chewing. In the case of a child, he recommends giving a wad of paper to chew, as the rapid working of the jaws stops the flow of blood; but why not try chewing gum instead of paper?—*Western Medical Review*.

VERATRUM VIRIDE IN MANIA.

Any physician who has not employed veratrum viride in acute mania has missed the best agency which is available for the cure of these distressing cases. It is one of the greatest advantages a physician can have to see the feverish sufferer, under the application of this remedy, pass from absolute sleeplessness into a state of quiet rest. That many cases which would otherwise go on to death are saved by the use of this remedy is a fact beyond question. The fear which many practitioners have of using veratrum viride, on account of the varying strength of its various preparations, must, of course, be met, when the drug is employed, by the use of Norwood's tincture.—*American Medical Journal*.

BLOOD FOR BABIES.

In the course of the second year there comes a time when the milk diet begins to be insufficient for the growing child, and Nature calls for a change, while yet the system is in many cases unprepared for solid food. This kind of deadlock results in diarrhoea or constipation, anaemia, restlessness, fretfulness, etc. In such cases the fit and radical remedy will be found in the administration of say ten drops of bovine in a little milk, at intervals of three hours.

Little Robert Valverdie, a patient who came under my care in the condition of malnutrition above described (after trying all the usual medical helps with no benefit), was immediately restored by the direct blood treatment. On the second day of taking bovine, the constipation and other trouble began to be relieved, and on the third day all signs

of ill-health had disappeared as if by magic. This simple treatment was continued for three weeks, the child thriving beautifully.—Case reported by Dr. T. J. Biggs.

HYSTERECTOMY FOR CANCER OF UTERUS.

Mrs. T., age 47, American. Diagnosis, carcinoma of uterus. Entered hospital Oct. 10, 1901, in a greatly run down condition. She was put on an absolute bovine diet, until Oct. 14, when at one o'clock she was given a high rectal injection of bovine and salt solution, three oz. of each, and at two o'clock, under ether anesthesia, I performed an abdominal hysterectomy. Just before the uterus was detached from the vaginal wall, the patient showed considerable shock, and consequently the nurse was ordered to give her another high rectal injection of bovine and salt solution, two oz. each. She responded to this beautifully. The operation was completed by the closure of the abdominal wound, the pelvis being drained through the vagina. Patient was put to bed with the pulse weak and 112. She was given another high rectal injection of bovine and salt solution, three oz. of each. In twenty-five minutes she was conscious, pulse greatly improved, being 100, and full in character. *No nausea, thirst or vomiting.* The second day the vaginal drain was removed, the wound and the vagina treated by injections of bovine pure, employed t. i. d. Previous to every injection of bovine into the vagina, the cavity was washed out with borax solution. These injections were continued three times a day up to Oct. 16, when twice in twenty-four hours was deemed sufficient. She was now allowed a light general diet together with bovine. Oct 24, the stitches were removed and the abdominal wound found to be healed. From this time on her recovery was uninterrupted and she was discharged cured, Nov. 16.—By T. J. Biggs, M.D., Sound View Hospital, Stamford, Conn.

PNEUMONIA.

An editorial in the *Archives of Pediatrics* for January, 1902, states, concerning the treatment of pneumonia in children, that there is less divergence of opinion among pediatric specialists than in the treatment of most other diseases, and that the practice adopted by them differs radically from that adopted by a large number of general practitioners among whom the prevailing tendency is toward complexity and the use of much medicine, while the ten-

dency of treatment among men of broadest experience is toward simplicity and the use of few drugs. In hospital practice, under physicians of extensive experience, the chest is protected by flannel or a cotton jacket loosely applied, with perhaps the occasional use of a mustard paste with the desire of embarrassing the respiration, which is always laboured in pneumonia, as little as possible. In private practice the chest is too often loaded with a heavy poultice, the weight of which must be lifted from thirty to fifty times a minute by respiratory muscles already overburdened. In the one case the fact being recognized that the disease is one marked by prostration, depression and exhaustion, the strength is conserved in every way, the child is disturbed as little as possible, nauseating medicines are avoided, and nourishment is looked upon as of vital importance. In the other case the child is not given sufficient rest, the temperature is taken too often, something is being constantly done, doses are unnecessarily multiplied, etc. The author protests against the heavy, hot and steaming poultices, soon cold and soggy, the forcing down of nauseating drugs, and the frequent disturbance of the child in overzealous efforts to cure, believing that they actually save less than the simpler methods of treatment. As fever is a necessary feature of pneumonia it need cause no alarm, unless it ranges abnormally high, and it is usually worse than futile to try to force it down by the use of coal-tar antipyretics which add to the depression natural to the disease. The author asserts that the picture is not overdrawn, as such errors are very commonly seen by consultants, and emphasizes the importance of the simpler line of treatment in this disease.—*Cleveland Medical Journal*.

Dr. I. L. Van Zandt in the *Southern Practitioner* for December, 1901, believes that in pneumonia in a large per cent. of cases creosote has a decidedly curative, in fact, almost an abortive effect. He quotes Prof. A. A. Smith as asserting that the treatment by creosotal or similar germicide is capable of causing an early lysis before the time for crises arrives; and further that a large percentage of pneumonic cases are cut short or aborted, almost all the rest are mitigated, and the remainder, a very small percentage, are not affected by the remedy. He gives to an adult seven and one-half grains or minims every three hours, and in urgent cases gives the dose more frequently. He has used carbonate of creosote without other medication, but believes that guaiacol or its carbonate cannot be used instead and has also found thiocol inefficient. Dr. W. H. Thompson in the *Medical Record* for February 1, 1902, also advocates very

strongly the use of carbonate of creosote in pneumonia, and reports eighteen cases of lobar pneumonia in patients ranging from ten to forty-five years of age, which were treated exclusively by this drug; of these but one alcoholic died; certainly a very satisfactory showing, as in three of the cases both lungs were involved, and these recovered. He gives fifteen grain doses every two hours, one hundred and eighty grains in the twenty-four hours, which is three times the amount given by Dr. Leonard Weber, who recently reported nine cases so treated with but one death. Dr. Thompson gives the drug in glycerine and peppermint water, and believes that it exerts a special effect upon the course of the disease. It also favourably influences that very undesirable complication in pneumonia—tympa-nites. It is in his opinion better borne than the guaiacol carbonate, and he has never noted any depressing effects nor injurious action upon the kidneys. In his cases the disease terminated by lysis in twelve and by crisis in only five days. The writer has used guaiacol carbonate in these cases with benefit, but usually gives three to five grains every few hours, and as the guaiacol is the main active constituent of creosote it probably matters but little in what form it is given.—*Cleveland Medical Journal*.

SYPHILIS.

Dr. G. Frank Lydston in the *Medical News* for January 18, 1902, emphasizes the cardinal principle in the therapy of syphilis that the physician should remember that he has to deal with three factors; first, a specific disease to be controlled by specific medication; second, a distinct individual personality in each patient; third, the results of antiseptic medication. There is too great a tendency to treat syphilis and absolutely ignore the individual afflicted by it. Ptyalism and iodism may both be avoided in many cases by attention to the eliminative functions. A useful point too frequently neglected is the ingestion of large quantities of water. He has succeeded in avoiding iodism in certain cases by mixing the daily dose of the drug with from two quarts to a gallon of water, and instructing the patient to drink the entire amount, a glassful at a time, during the 24 hours. Hot baths are a very useful adjunct to the treatment, increasing tissue metamorphosis, favouring elimination, and necessarily enhancing the therapeutic action of the mercury and iodide while attention to the bowels is very important. When digestive disturbances exist and gastric symptoms are stubborn, the substitution of the hypodermic

or inunction method is imperative. When lesions of the mucous membranes are very resistant to treatment, and the patient does not tolerate mercury and iodide well, he advises the substitution of the potassium chlorate for these remedies, believing that, while in no sense a specific, it has a marked and positive action of its own in syphilitic lesions, having seen most beneficial results follow its use. He recommends the combination of the preparations of iron with the mercurials to obviate the debilitating effects of mercury, and in long-standing cases considers the syrup of the iodide of iron the most eligible preparation of the drug. In the same journal Bonveyron and Siraud are quoted as having given orthoform in total daily doses of two to three grams, divided into four or six powders, with decided success in the essential headache of syphilis. Most frequently the smaller dose of the two grams, or thirty grains, in 24 hours, is sufficient to quiet all this rebellious pain. Usually a decrease takes place during the first night and after that the pain disappears entirely. For the intermittent headaches, one-half grain is given one hour before the expected return of pain, and two similar doses through the night. For the continuous pain four such powders should be given at regular intervals, say six hours.—*Cleveland Medical Journal*.

CEREBRAL HEMORRHAGE.

In *Merek's Archives* for March, 1902, Dr. William Browning presents a series of "don't's" to be remembered in the treatment of cerebral hemorrhage. Don't give stimulants. Their use in such cases is most reprehensible. Don't resort to saline injections. During the acute stage a limitation of fluids is in order. Don't use the depressant diaphoretics such as ipecac, pilocarpin or apomorphin. They tend to nauseate, an inclination otherwise too common, and, in the degree of attempts at vomiting, most undesirable. Don't prescribe digitalis. The author has repeatedly seen it bring on another attack. It is a dangerous drug in any individual with a liability to apoplexy, and for this if for no other reason of questionable utility in nephritis. When anything of the sort must be used, strophanthus is safer. Don't resort to opiates. They are likewise contra-indicated. Don't try nitrites, as their use in any form is here out of place. Don't permit any muscular exertion on the patient's part, and moving by others should be limited as much as possible.—*The Cleveland Medical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

INTESTINAL OBSTRUCTION.

In very bad cases of intestinal obstruction, in which, for any reason, operation has been very long delayed, we may feel like giving the patient the benefit of the only chance that remains to him. These patients are practically unable to feel pain, and administration of a general anæsthetic to them is exceedingly dangerous. Use local anæsthesia, rapidly open the abdomen, draw out the nearest coil of distended intestine, stitch it rapidly to the external wound, and open into the gut at once. Use hot saline injections by the rectum and intravenously. If we can thus tide the patient over a couple of days we may later on deal with the obstruction itself.—*International Journal of Surgery.*

THE DISADVANTAGES OF GAUZE PACKING IN APPENDICITIS WORK.

R. T. Morris, New York, states that gauze packing sometimes causes ileus and bowel obstruction by simple and direct mechanical pressure. It more often causes an excessive exudation of reparative lymph, which may result in annoying peritoneal adhesions and life-long discomfort for the patient. Its employment usually leaves a very weak place in the patient's abdominal wall, and invites the development of post-operative ventral hernia. In the opinion of the author the worst feature of gauze packing, however, is the tendency it seems to possess to depress the patient's general resistance and to prolong, if it does not sometimes also cause, the condition of surgical shock. The great misery caused by the removal of the gauze packing, when a change of dressing is made, can be described only by the patient. Since the use of iodoform has become so widespread, the danger of iodoform poisoning has been added to that of the

formerly used plain gauze. Many of these cases have been and are still regarded as being cases of septicæmia; while the symptoms of these two states are very similar, in iodoform poisoning the wound is apt to look remarkably well, while the patient does not; whereas in septicæmia, neither the wound nor the patient looks remarkably well. In the former condition, free iodine can be found in the patient's urine, and a simple test consists in adding calomel to a specimen of the urine, and noting the reaction as iodide of mercury is formed when the mixture is stirred. The author believes that it is not safe to teach that gauze packing should be at once given up, but that one should work toward the point of giving up gauze drainage as rapidly as experience proves that it can be safely done.—*New York Medical Rec., St. Louis Medical Review.*

TREATMENT OF FOREIGN BODIES IN THE ESOPHAGUS.

N. Stone Scott (*The Cleveland Medical Journal*, March, 1902) says: Treatment of foreign bodies in the esophagus will vary materially with the kind of body and complication of the case. Thus, a hard substance should be immediately removed. Nothing is gained by delay, and if allowed to remain, infection and inflammation supervene and add to the difficulties of the case. When the patient is anesthetized the foreign body can frequently be grasped by forceps or coin-catchers, and withdrawn through the mouth. If lodged as far down as the diaphragm, it can usually be pushed on into the stomach, provided there be no pathologic thickening of the esophagus at this point. Subsequent treatment of such cases will depend upon the symptoms. The patient should be allowed to recover from the anesthetic, and if no further symptoms warranting interference supervene, nothing further should be done. The foreign body will usually pass through the pylorus and the rest of the alimentary track without difficulty. Should it become lodged lower down, operative interference may be required for its removal.

When the cause of obstruction can neither be grasped by the forceps and withdrawn, nor pushed on into the stomach, the simplest and best method of relief is by an external esophagotomy. Even should it be possible to remove the body through the mouth, this same procedure in order to provide for drainage in advisable in cases in which the foreign body has been allowed to remain until the patient has become septic. The incision is made upon the

left side at the internal border of the sternocleidomastoid, the dissection carried down to the esophagus by means of the blunt instruments rather than by cutting, the various structures being pushed to one side, the esophagus is opened with a sharp instrument by a clean cut, and the foreign body extracted with as little laceration of the tissues as possible. The incision in the esophagus should be closed with a catgut, and a strand of gauze, horsehair, or other means of drainage inserted, the external skin incision being closed throughout most of its extent. It is a technical error to entirely close the skin incision, because the structure of the esophagus renders its sterilization impossible, and infection is liable to occur from the wound in the esophagus. An esophageal fistula is apt to result from the operation, but as a rule is of slight moment and will spontaneously close in the course of a few weeks. The after-treatment of these cases is simple. Nothing should be given by mouth for a number of hours until the first efforts at repair have been accomplished, although as a rule the patient will be able to swallow with little or no difficulty.

INDICATIONS FOR OPERATION IN GASTRIC ULCER.

1. Acute hemorrhage should rarely be treated by operation. The results of interference have not been good, while the results of medical treatment have been satisfactory. When, however, a hemorrhage frequently repeats itself, even though not severe in amount, it will demand operative treatment as soon as its recurrent character is plain.

2. Small frequent hemorrhages, threatening anaemia give a clear indication for operation.

3. Perforation of the stomach, either acute with general peritonitis or chronic with surrounding adhesions and perigastritis, demands instant operation.

4. When an ulcer runs a chronic course with a strong tendency to recurrence, and gradually diminishes the patient's capacity for work and the enjoyment of life, an operation is indicated, especially when the patient is so situated as to be dependent on his daily work for support, and unable closely to regulate his diet.—A. T. CABOT, Trans. Mass. Med. Soc.

CORNS.

Perhaps the best method for securing the partial removal of corns, by the application of chemical substances, is that recommended by Unna. A ring of glycerine jelly

is painted around the circumference of the corn so as to form a raised rampart. A piece of salicylic plaster-mull is then cut to the size and shape of the central depression, and applied to the surface of the corn. This is then covered with a layer of glycerine jelly, and before it sets, a pad of cotton-wool is applied to the surface. This process is repeated as often as is necessary, until the horny layer of the corn separates and is cast off.

If the point of a sharp, thin-bladed knife be introduced at the groove which runs round the margin of the corn, and be made to penetrate toward its central axis, by the exercise of a little manual dexterity the horny part of the corn can be easily made to separate from the parts beneath. This method of removal is one which is much in favour with chiropodists.

Any method of treatment, however, to be curative, must secure the removal of the entire corn together with the underlying bursa.

Having taken every precaution to render the operation aseptic, a spot is selected for the injection of the anaesthetic solution. At this point the skin is rendered insensitive by the application of ethyl-chloride, and 5 minims—more or less—of a 4-per-cent. solution of eucaine is injected into the subcutaneous tissue beneath the corn. Having waited a few minutes, the superficial parts at the site of the incision are rendered insensitive by ethyl-chloride. Anaesthesia is now complete, the process itself being painless, and the operation may at once be commenced. Two hemi-elliptical incisions meeting at their extremities are made through the skin around the circumference of the growth, care being taken that they penetrate well into the subcutaneous tissue. Seizing the parts included in the incision with a pair of dissecting forceps, a wedge-shaped piece of tissue—including the corn, a layer of skin and subcutaneous tissue, and the bursa, if present—is dissected out. The oozing is pretty free, and it is sometimes necessary to torsion a small vessel; but the haemorrhage is never severe. The edges of the wound are brought together by one or two fine sutures; an antiseptic dressing is applied, and the wound left to heal—primary union in a few days being the rule. The net result is the production of a layer of scar-tissue at the former site of the corn. It might be thought, perhaps, that the formation of a scar on an exposed position, where it was liable to be subjected to pressure and friction, would lead to untoward results; but such in practice is not the case.

The chief advantages to be derived from the complete excision of corns are that, as a method of treatment, it is

safe, speedy and painless; while the results, as far as a cure is concerned, are permanent and effected at a minimum of time and trouble. E. H. Freeland (*Edinburgh Med. Jour.*, Nov., 1901).

WOUNDS OF THE THORACIC DUCT OCCURRING IN THE NECK.

Drs. D. P. Allen and C. E. Briggs make a report of two cases, with a résumé of seventeen cases in *American Medicine*, of Sept. 21, 1901.

The writers have made a careful and interesting study, of wounds of the thoracic duct, and offer some valuable suggestions as to methods of procedure in dissections of the neck, and the operative treatment advisable if the large lymphatics are wounded. In operations in this region, where there is a probability of wounding the duct, they suggest that about three hours before the operation the patient be given four to six ounces of cream. They advise this, since, in the intervals of digestion, lymph so closely resembles serum that its presence is often not recognized, and wounds of the lymphatics pass unnoticed until some days before the operation. But by giving cream a few hours before operating, the absorption of fat is induced, and chyle is so characteristic in appearance that its presence in a wound would be immediately noticed and search made for the injured lymphatic. As a result of their studies they conclude:

1. The increasing frequency of extensive dissections of the neck makes it desirable to consider means of avoiding injury to the thoracic duct.

2. It is desirable that if wounds of the thoracic ducts or its branches occur, they would be recognized at the time of the operation. If there is a probability of wounding the duct four to six ounces of cream should be given to the patient about three hours before operating. This is especially desirable in secondary operations undertaken for the purpose of locating point of injury.

3. That suture of the duct with fine silk or catgut be accomplished when possible; that all small discharging lymph radicles be ligated; that the ligating and clamping of lymphatic vessels of considerable size be avoided, unless the integrity of the thoracic duct itself has been demonstrated; that where suture of the duct or large radicles is impossible, gauze packing, firmly and accurately applied, be used; that the head and neck be kept at rest; the use of morphine to a considerable degree being recommended if necessary.

4. That until the repair of the duct is thought to be complete, nutrition should be sustained on albuminous material, with possibly a small amount of carbo-hydrates, but with an absolute exclusion of fats.—*Maryland Medical Journal*.

RESULTS OBTAINABLE IN THE TREATMENT OF DENSE, TIGHT, DEEP-LYING STRICTURES OF THE URETHRA.

L. S. Pilcher (*Annals of Surgery*). In cases of retention due to a deep stricture, prolonged efforts are not made to secure the passage of instruments. If a No. 2 or No. 3 French olive-pointed bougie does not pass readily, the bladder is aspirated and preparation made for urethrotomy, usually without a guide. A free incision is made in the perineum, and if the urethra is found to be a distorted, hardened mass of cicatrical tissue, from one-half to three-quarters of an inch may be excised and the divided ends brought together. In the majority of the cases the urethra is split along its floor and a gorget introduced into the bladder, followed by the introduction of the finger. The first joint of the index finger corresponds to about a No. 60 sound of the French scale, and dilatation short of this is not advisable. The meatus and penile urethra is cut until it admits a No. 40 sound, and a sound of that size is passed through the entire urethra into the bladder. A rubber tube of about the same size is passed through the perineal wound into the bladder and held in place by sutures passed through the sides of the wound. A packing of iodoform gauze is placed around the tube. After four days the tube is removed; sounds Nos. 36, 38, and 40 are passed in succession. The tube is not replaced, and the sounds are passed every third day for two weeks, then once a week, then at rapidly-increasing intervals—once a month, once in six months, once in twelve months. There is no theoretical reason why these old strictures should not be cured permanently, as overstretched scar tissue, as seen in ventral hernia, has no tendency to contract. Some cases which have been followed for several years show that the cure has been perfect.—*Georgia Journal of Medicine and Surgery*.

CURE OF CHRONIC BRIGHT'S DISEASE BY OPERATION.

Edebohls (*Med. Record*, December 21, 1901).—The author first operated upon chronic nephritis, November 29, 1901, and while the operation was primarily a nephropexy, done for the relief of a loose kidney with nephritis, the re-

sult was a cure of the nephritis. In all he has operated upon six cases of nephrotosis with nephritis, obtaining favourable results in four. On January 10, 1898, he undertook for the first time this operation for the purpose of curing chronic Bright's disease, doing a bilateral nephropexy, with radical cure of the Bright's disease. He reports eighteen cases operated upon for chronic Bright's disease, five of which had right chronic interstitial nephritis; four had left chronic interstitial nephritis; four had right and left chronic interstitial nephritis, two had right and left chronic parenchymatous nephritis; three had right and left chronic diffuse nephritis. In fourteen of the eighteen both kidneys were operated upon; in twelve at one sitting, and twice at two sittings. In four cases operation was performed on one kidney only, in every instance the right. Two of them recovered complete and lasting health.

Chronic Bright's disease was unilateral in nearly one-half of all the cases, which fact was somewhat of a surprise and revelation to the author. He finds no difficulty in recognizing the disease in the kidney as it lies pulled through the wound before him with the blood circulating through it. From two cases a piece of the kidney was obtained, and the diagnosis verified by the pathologist.

While extensive denudation of the kidney was a factor in all the nephropexies, in the last two cases total extirpation of the capsule was done; in one, bilateral at one sitting; in the other the patient had but one kidney. The right had been removed for a septic process some months prior.

The method of operating is in part as follows: After cutting down to the kidney, it is freed from its fatty capsule and brought out through the wound to full view. The capsule proper is incised along the entire length of the convex external border and clean around the extremity of either pole. Each half of the capsule is now dissected from the organ and cut off clean to its junction with the pelvis, and removed. The kidney is dropped back in place and the wound closed without drainage, unless there is extreme edema of the parts, when drainage is used. Ether was the anaesthetic used in all cases except one.

Of nine cases operated upon one year or longer ago, one only failed of radical cure of the Bright's disease. This one had the left kidney removed by another surgeon three years later, and the right kidney, which the author had operated upon, sustained life for five years longer, when a third surgeon did a hysterectomy, from which the

patient died. Four cases were operated upon six months ago: two are free from casts and albumen; the other two show improvement. In the two last cases operated upon, the time is too short for deductions.

The author believes, especially from the above eight cases of cure operated upon one year or longer ago, that chronic Bright's disease is curable by operation, but as the time required for improvement to begin to show itself is ten days or more, and as this improvement is gradual, the late stages of the disease may not be fitted for the procedure.

While operating on a kidney on which a nephro-pxy had formerly been done, he observed numerous arteries large enough to require ligation, passing between the fatty capsule and the kidney with the flow of blood towards the kidney. This increased blood supply, most probably, leads to gradual absorption of the adventitious tissue in the diseased kidney, giving relief to the tubules from pressure, and allowing the epithelia to regenerate. The cure is gradual, requiring from one to twelve months. It is not a relief of kidney tension from removing the capsule, but of vascularization. The capsule in chronic Bright's disease never compresses the organ, although it may be adherent, but may even sit loosely upon the kidney. The fatty capsule and the kidney are both liberally supplied with blood vessels, and the denuded kidney furnishes an extensive surface for intercommunication, while the fibrous capsule proper is an impenetrable barrier to the passage of the blood vessels.

The author operates if the expectancy of life is more than a month, if there are no incurable complications, and an anaesthetic is not contra-indicated.—*Interstat. Med. Journal.*

THE OPERATIVE TREATMENT OF TRAUMATIC INTRACRANIAL LESIONS.

C. Phelps, New York, after a brief review of the principles of treatment of cranial fracture, discusses the rules of procedure for the treatment of intracranial injuries. Successful treatment depends upon correct diagnosis, and the diagnosis in turn upon accurate knowledge of existing pathic conditions. The primary traumatic intracranial lesions are classified by the author as follows:—1. Hæmorrhages. 2. Contusions; 3. Brain lacerations. Hæmorrhages are subdivided into: (a) Supradural or epidural; (b) Pial; (c) Cortical. Contusions are: (a) Meningeal; (b) Cerebral.

Each of these conditions are briefly discussed, together with the treatment indicated. The justifiable use of operation in head injuries is shown to be very limited. It may be summarized as properly general in depressed cranial fractures, frequent in comparatively uncomplicated epidural hæmorrhages, and exceptional in subdural lesions, whether of the brain or of the pia-arachnoid membrane. The resort to operative measures, which is essential under favourable constitutional conditions in abscess of the brain and in intracranial gunshot wounds, is not considered in this article. If, in the general class of intracranial injuries, operation is to be but infrequently done, the question of operation will often be raised, and decision as to the course then to be pursued will entail grave responsibility, since error in judgment may deprive the patient of a chance for life, by increasing the danger of an already critical condition.—*N. Y. Medical Journal*.

Jottings.

STYES.

When repeated attacks have occurred the lid-edges should be thoroughly smeared every day for three months, with

Aristol.....7½ grains

Vaselin.....

Lanolin.....aa 75 grains.

—*System of Practical Therapeutics*, 2nd Edition, 1901.
 Edited by Dr. H. A. Hare.

ACUTE RHEUMATIC PHARYNGITIS.

In cases in which the pain and muscle soreness are limited to the region of the throat, three to five grain doses of Salophen every three or four hours will quickly relieve the soreness and pain.—*System of Practical Therapeutics*, 2nd Edition, 1901. Edited by Dr. H. A. Hare.

LINSEED MEAL POULTICE.

Warm a basin, pour in boiling water, sprinkle in the meal, stirring vigorously, till it becomes of the consist-

ency of thick porridge; spread on tow or old linen, turning in the edges all around; before applying put it against one's cheek to feel that it is not too hot. Retain in position with a broad flannel roller, secured with safety-pins. Renew every four hours or oftener. The poultice should not exceed half an inch in thickness. Caution is necessary in poulticing the chest of infants in order not to overload the chest and tire out the respiratory muscles. Ashby and Wright (*Pediatrics*).

FOR PUERPERAL ECLAMPSIA give green root tincture of gelsemium, hypodermically, in thirty to sixty drop doses.

A SMALL QUANTITY of acetanilid dissolved in the mouth in contact with an aching tooth will often give quick relief.

HYPODERMIC INJECTIONS of pilocarpine, fifteen or twenty minutes apart, have relieved severe cases of edema glottitis.

GUAIACOL mixed with an equal part of glycerine and applied over the seat of a neuralgic or muscular pain will often give quick relief.

A SPOON IN A GLASS filled with hot water prevents the breaking of the glass, because the metal rapidly absorbs a large part of the heat.

A SOLUTION OF five grains of tannin to an ounce of water is a very serviceable application to sore nipples. Apply night and morning.

IN SPASMODIC URETHRAL STRICTURE give cimicifuga and gelsemium in full and frequent doses. Good results may be looked for in three hours.

ALOES APPLIED TO an ulcer or denuded spot will as effectually and as promptly prove cathartic as when administered in the usual way in pill.

AN INCIPIENT COLD in the head can be checked every time if the nose is thoroughly rinsed out with a weak solution of potassium permanganate.

IT IS STATED THAT 75 grains of picric acid dissolved in two ounces of alcohol, to which a quart of water is added, makes an excellent application for burns.

FOR MOIST CONDYLOMATA appearing on the genital organs, a powder composed of equal parts of burnt alum and tannic acid is said to be an admirable remedy.

LOBELIA in small and often repeated doses, especially when used in combination with ammonium carbonate, ipecac or grindelia, is a stimulating expectorant.

TEN DROPS EACH of chloroform and tr. aconite mixed and applied locally will instantly relieve pain, especially of sciatica, and this disease when treated thus two or three times a week will soon cease to return.

DR. RUMBOLDT says that he always sprays the nasal cavity with vaseline as hot as can be borne by the patient, after any operation in the nose which causes hemorrhage. No matter what the amount of hemorrhage, Dr. Rumboldt says this will always promptly check it.

A PAROXYSM OF PERTUSSIS may be prevented or cut short by placing the forefinger on the root of the tongue and pressing gently downward and outward till the spasm of the epiglottis is overcome and the larynx opened for the admission of air. This will save many a moment of terrible agony, and many a child from death by asphyxia.

Therapeutic Notes.

ACUTE NASAL CATARRH.

R Carbolic acid, 8 minims.

Ichthyol, 1 drachm.

Diluted alcohol, 2½ drachms.

Aquae destillatae, ad 3 ounces.

M. Sig.: Use as a spray, by means of atomizer, two or three times a day. (*Journal of the American Medical Association.*)

TO ABORT FURUNCLES.

Calcium sulphide in doses of $1\frac{1}{16}$ grains will usually answer this purpose; increased to $\frac{1}{2}$ grain, pus formation is inhibited with almost certainty.

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Editorial.

Charges of carelessness against hospitals, accompanied by suits for damages, have fortunately been rare in Canada. They are, however, not unknown, though we think, in most cases, the suit for damage has been brought against one of the hospital's medical officers. Such a case was recently tried in Montreal, where a medical man attached to our largest hospital was charged with removing a foot without the patient's consent. The case fortunately failed, inasmuch as it was proved beyond any doubt that the action of the surgeon was in the best interest of the patient. Still, from some remarks which were made by the judge, it was clear that in the case before him, the line of demarkation was closely touched, and that it would not have taken much to turn his judgment in the opposite direction. Medical opinion as to justifiable action does not always commend itself to the legal mind. In cases which we have known, and where it seemed clear that the action of Medical Corporations was in the very best interest of the public—the Courts have decided that the action taken was not legal. It must be remembered that the mental education of the medical and legal profession is different. The former looks

upon himself as a proctor of the public—the latter simply as the administrator of the law. Whether that law is in the interest of the public is not taken into consideration, and though those who passed it may have so intended, its wording may fail to have it so interpreted. We find that our brethern in New York and Buffalo have had some reason of late to conclude that law is not always justice. In the *Buffalo Medical Journal* for May we find the following article, which we commend to the very careful consideration of our readers, but more especially Hospital Surgeons. It would also be well if these gentlemen brought it to the serious attention of the Lady Superintendents of Hospitals. If such actions were to be taken against our Canadian Hospitals, and the same legal decision arrived at, it would indeed be a serious matter.

“There has been decided in New York City a case which has a peculiar interest in Buffalo, inasmuch as it will affect the question of the payment of damages by two Buffalo hospitals.

“Something over two years ago Helen G. Ward was taken to St. Vincents' Hospital for operation. At the conclusion of surgical procedures she was placed in bed and a nurse in charge of the case put hot water bags about her. She suffered burns more or less severe from these hot water bags. When she left the hospital she brought suit for damages against the hospital and was by direction of the court non-suited. An appeal resulted in a new trial being ordered, in which case the jury disagreed. A third trial was secured, and the jury gave Miss Ward a verdict of \$10,000. The hospital's attorneys prepared papers in appeal and carried up the case. The Appellate Division set aside the \$10,000 verdict and ordered a new trial on errors. The case was tried before Justice Beach, in New York City, and resulted in an increased verdict of \$18,000 for Miss Ward.

“The hospital authorities will now probably pay the verdict, for, according to the opinions of Buffalo lawyers who have been watching the progress of this remarkably well-fought case, there is nothing on which to base another

appeal, the last case having been tried with a rigid observance of the rules of evidence, and great care having been exercised by the trial judge with a view to preventing either side from taking advantage of any errors of judgment. The main contention of the hospital was to the effect that all necessary care was exercised in the treatment of the patient; that the burns were unavoidable. The plaintiff set up that the nurse in charge of her case after the operation was an undergraduate, and therefore not wholly qualified to act. A novel proposition raised by the hospital's attorneys was that the placing of a hot water bag did not require any special degree of qualification; hence, the question of inexperience was not to be raised. The jury appears to have held, however, that the nurse was an agent of the hospital, and that the latter was therefore liable for her acts.

"There are two similar cases in Buffalo which will now either be brought to trial or settled on the strength of this verdict. In each case patients were burned more or less severely by the application of hot water bottles placed by undergraduate nurses. In one case it is stated that considerable deformity has resulted."

CANADIAN MEDICAL ASSOCIATION.

MONTREAL MEETING, SEPT., 16, 17, 18, 1902.

Below will be found a list of papers already promised for the annual meeting at Montreal in September next. Members and others contemplating contributing to the success of this meeting should notify the General Secretary at an early date of their intention. Arrangements as to railroad and steamship rates, entertainments, clinics, etc., will be announced in due time.

"Address in Medicine"—Professor William Osler, Baltimore.

"Address in Surgery"—Dr. John Stewart, Halifax, N.S.

"Lantern Demonstration on the Exanthemata"—Dr. Corlett, Cleveland, Ohio.

Paper by Dr. D. Campbell Meyers, Toronto.

Paper by Dr. Geo. S. Ryerson, Toronto. Subject not yet decided on.

Paper by Dr. A. Laphorn Smith, Montreal, also card specimen.

Paper by Dr. F. A. L. Lockhart, Montreal.

"On some points in Cerebral Localization, illustrated by a series of Morbid Specimens and some Living Cases," Dr. James Stewart, Montreal.

Paper and specimens by Dr. Geo. A. Peters, Toronto.

"The Country Practitioner of To-day," Dr. J. R. Clouston, Huntingdon, Que.

Paper by Dr. P. Coote, Quebec.

"The Pathologic Prostate and its removal through the Perineum," Dr. A. H. Ferguson, Chicago.

Paper by Dr. Geo. E. Armstrong, Montreal.

Paper by Dr. Ingersoll Olmsted, Hamilton.

Paper by Dr. Casey A. Wood, Chicago, "Empyema of the Frontal Sinus."

"On Tuberculosis"—Dr. J. F. Macdonald, Hopewell, N.S.

"X-ray in Cancer"—Dr. A. R. Robinson, New York.

"On Degeneration of the Spinal Cord, Anæmia, Malnutrition with Microscopic Specimens"—Dr. David A. Shirres, Montreal.

GEORGE ELLIOTT,

General Secretary.

129 John street, Toronto.

OBITUARY.

In the death of Dr. Wyatt Johnston, which occurred on the 19th of June last, not only Montreal, but the entire profession of the Dominion, sustained a severe loss. For a considerable time before he was compelled to take a private ward in the Montreal General Hospital, of which staff he was a member, Dr. Johnston had suffered from local manifestations of blood poisoning contracted in his *post*

mortem work. This eventually manifested itself in a severe attack of phlebitis, from which he was apparently rapidly recovering, when an embolus was carried to the pulmonary artery, and death immediately ensued. He was of a peculiarly retiring nature and had a most amiable disposition, which made him a universal favourite. Of his peculiar fitness to fill the important positions to which he was assigned not only in the Medical Faculty of McGill, of which University he was a graduate, but as specialist in pathological work for the Government, there was no doubt. He knew his work most thoroughly, and he did it well. His greatest discovery, and one with which his name will ever be associated, is Johnston's modification of Widal's re-action of the typhoid bacillus. The method devised by Dr. Johnston is now universally employed as the most reliable means of diagnosing this disease. His memory will remain green for many a day among his numerous friends. A good man has been cut off in the very midst of his usefulness.

PERSONALS.

Drs. Dorion and Walker (M. D., McGill, 1902), have been appointed House Surgeons to the Western General Hospital.

Mr. J. E. Morrison has been appointed Lecturer in Chemistry at Bishop's College and Assistant to Professor Donald.

Dr. George. Hall (M.D., Bishops, 1896) has been appointed Lecturer in Physiology in his Alma Mater, in place of Professor Bruère resigned.

Dr. F. O. Anderson (M. D., Bishop's, 1900), sailed for Europe on the 31st July. He will visit Edinburgh and devote a few months to special work.

Surgeon-Major Elliott (M.D., Bishop's, 1889), who went to South Africa as medical officer to one of the regiments of the Mounted Rifles which sailed from Halifax early in May last, returned with his regiment, arriving in Halifax on the 29th July. We hear that he has been appointed by the Imperial authorities, Principal Medical Officer to the troops in Bermuda, for which place he has already sailed.

Dr. Alexander Macdonald (M. D., Bishop's, 1900) after filling most acceptably for over a year the position of Medical Superintendent of the Western General Hospital, has resigned to commence practice in Montreal.

Drs. McGregor and Cowley (M. D., Bishop's, 1902) have resigned their positions of House Surgeons to the Western General Hospital to become surgeons on the Elder-Dempster line of steamships. They sailed for Liverpool on the 24th July.

Book Reviews.

The Diagnosis of Surgical Diseases. By Dr. E. Albert, late Director and Professor of the first Surgical Clinic at the University of Vienna. Authorized translation from the eighth enlarged and revised edition, by Robert T. Frank, A.M., M.D., with fifty-three illustrations. D. Appleton & Co., New York, 1902.

This book has our complete endorsement. It is certainly one of the most valuable and fascinating volumes which we have seen among recent medical publications. Students, practitioners and teachers in particular are under deep debt of gratitude to Dr. Frank for giving us in the English language, one may say, the life work of such a keen observer and noted clinical teacher as Professor Albert. We have not heretofore seen any work on surgical diagnosis which can compare with it. Diseases and diseased conditions are taken up and grouped according to points of resemblance, and not according to any theoretical classification. A valuable feature in the work is the great number of interesting cases reported and followed, to the operating table, or to autopsy, either to confirm or to correct the diagnosis. The chapter on injuries to the skull and brain is specially interesting. Many cases are cited and analysed from a diagnostic point of view. The following two cases will serve as an illustration of the character of the work. Case 1, "a brick fell upon the right frontal region of a man 35 years of age. Unconsciousness for 10 minutes, followed by headache and dizziness. In four days those symptoms disappeared, but after the accident the left arm could not be properly moved. On the fourth day involuntary twitchings appeared in this arm."

In discussing this injury he says: "The rest of the history could not be quoted, but from what has been obtained it is evident that a very moderate degree of concussion had been sustained. As paralysis in the left arm followed the injury, some local lesion of the right hemisphere must have occurred. It is probable that this was situated in the upper part of both ascending frontal and parietal

convulsions. The spasms noticed on the fourth day were the result of reactive processes at the site of injury.

Case 2. A man run over by a cab was brought to the hospital without any skin wound, depressed fracture or disturbance of general condition. After six hours, paralysis, first of the left, next of the right, extremities supervened. This was followed by coma and death within three days. Autopsy showed extravasation of blood between the left parietal bone and the dura. The blood clot weighed 140 grammes and caused a flattening of the brain. The surface of the right hemisphere was bruised by *contra coup*. This case is then discussed from a diagnostic standpoint as follows :

The symptoms of paralysis increased with such rapidity that but one cause could be assigned. This cause is arterial hemorrhage, which is always rapid. It has been proven that the middle meningeal artery can rupture even without injury to the cranial bones. This rupture may occur on the side opposite to the blow, merely as a result of the momentary change in the contour of the bones. A sinus may tear, without consequent hemorrhage, but the bleeding is never as extensive. Why did the paralytic symptoms not manifest themselves at once? This fact is characteristic of injury to the middle meningeal artery. The blood must first separate the dura from the bones before it can balloon out the membranes and thus exert pressure upon the brain. As soon as this is accomplished pressure symptoms rapidly develop. But why did paralysis first appear in the left extremity when the left hemisphere was injured? With compression of the left hemisphere a right-sided hemiplegia was to be expected. Probably the contusion had previously impaired the circulation of the right hemisphere, and the pressure was therefore more readily felt in that region. Was the left hemiplegia not the result of the right-sided contusion of the brain? No, for if it had been, this hemiplegia would have appeared immediately after the injury.

F. R. E.

Progressive Medicine—A quarterly digest of advances, discoveries and improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia; assisted by H. R. M. Landis, M. D., Assistant Physician to the out-patient department, Jefferson Medical College Hospital. Vol. i., March, 1891, and vol. ii., June, 1902.

We regret that the March number only reached us at the same time as did the June number, although it was issued by the publishers on time. We have so repeatedly spoken favourably of this quarterly, that we can only affirm our previous opinion. It is particularly well-gotten up, and makes a handsome appearance on the library shelf. The March volume takes up the Surgery of the Head, Neck and Chest; Infectious diseases; Croupous Pneumonia and Influenza; Diseases of Children; Pathology; Laryngology and Rhinology; Otology. The June number takes up the Surgery of the

Abdomen, including Hernia, Gynæcology ; Diseases of the Ductless Glands ; the Hæmorrhagic diseases ; Metabolic diseases ; Ophthalmology. The contributors to both these volumes are men well known in their respective fields of special research, and they have brought together, in a compact form, the latest literature on the subject.

F. W. C.

Stricture of the Urethra and Hypertrophy of the Prostate. By J. G. Freyer, M. A., M. D. M. Ch., Surgeon to St. Peter's Hospital, Lieut.-Colonel Indian Medical Service (retired). Bailliere, Tindall & Cox, 21 King William street, Strand, London, England, 1902.

In May, 1901, we reviewed this work, and now we are favoured with a copy of a new edition. That a new issue has been called for so soon is convincing evidence that it has been appreciated by the profession. This is not to be wondered at, because the author, for many years, has occupied a very distinguished position as a surgeon in the British India Medical Service. In this service he has had ample opportunity of putting to the test the many practical suggestions which his book contains. He, therefore, speaks with no uncertain sound. The style is most pleasing, and as it is not very voluminous, a few sittings will enable any one to thoroughly master its technique.

F. W. C.

International Clinics.—A quarterly of clinical lectures and especially prepared articles on all branches of Medicine and Surgery and other topics of interest to students and practitioners. By leading members of the Medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U.S.A., with the collaboration of John B. Murphy, M.D., Chicago ; Alex. D. Blackader, M.D., Montreal ; H. C. Wood, M.D., Philadelphia ; T. M. Rotch, M.D., Boston ; E. Landort, M.D., Paris ; Thos. G. Morton, M.D., of Philadelphia, and Chas. H. Reed, M.D. ; J. B. Ballantyne, M.D., of Edinburgh ; and John Harold, M.D., of London ; with regular correspondents in Montreal, London, Paris, Leipsic and Vienna ; volume I., 12th series. J. B. Lippincott & Co., Philadelphia, 1902. Canadian Agent: Charles Roberts, 1524 Ontario street, Montreal.

This volume contains some nineteen articles and a review of the progress of medicine during the year 1901. The first two of a series of biographical sketches of living physicians are given, S. Weir Mitchell, M.D., LL.D., and John A. Wyeth, M.D., LL.D., being the subjects. In these sketches an insight is given into the character, history, methods of working, work accomplished and literary efforts of members of the profession who stand as our recognized leaders. The elements of success are seen to be in these instances chiefly persistent and intelligent application, quick perception, self-confidence, common sense, diversity in work and conservation of strength. The biographer, Guy Hinsdale,

A.M., M.D., deems waste of time and waste of energy to be the two chief causes of failure. Photographures are given of the men, their clinics, operating rooms, etc.

Dr. Horatio C. Wood, jun., contributes part II. on a description of the methods of investigating the action of drugs. How to study the effects of drugs on respiration, the blood and nervous system is fully discussed, accompanied with cuts of the apparatus employed.

An interesting article is that On the Significance of Basophilic Granules in Red Corpuscles, with Special Reference to Their Occurrence in Chronic Lead Poisoning, by Charles E. Simon, M.D. He traces the observation made in regard to these granules from the time of their discovery, by Marchiafava and Celli in 1884, to his own work during the last three years, giving the technique in detail. They are found mostly in cases of pernicious anæmia, malaria, myelogenous and lymphatic leukæmia and in lead poisoning. The origin of the cells and their clinical significance is discussed. The article by John C. Hemmeter, M.D., Ph.D., on Gastro-Intestinal Auto Intoxication is very instructive. Part I. appears in this volume and the subject is considered under such heads as: Nature and Concept, Terminology, Classification, Definition, Significance of the Doctrine, Criticism of Experimental Evidences, Auto-infection *versus* Auto-intoxication, Criticism of the Clinical arguments in Favour of Auto-Intoxication, Protective Function of the Liver, Causes and Types.

Other valuable contributions are: Habitual Constipation, by I. Boas; M.D.; The Climate of New England, by Guy Hinsdale, A.M., M.D.; The Treatment of Acne, by Prof. H. Hallopeau; The Surgical Treatment of Infantile Palsy, by Drs. J. K. Young and James Kelly; The Contest between the Advocates of Symphysiotomy and the Partisans of Cæsarean Section, by A. Boissard, M.D.

One-third of the volume is taken up with a review of the Progress of Medicine during 1901, by Edward Willard Watson, M.D. Besides a review of the chief advances in Medicine, Surgery, Therapeutics, Pathology, Neurology, Obstetrics and Gynæcology reference is made to the present status of X-rays, Medical Legislation, New Instruments and Devices, the eightieth birthday of Prof. Virchow and the death of President McKinley. The publishers and editors are to be congratulated upon the wisdom displayed in the character of the contributions secured, and the attractive and practical style of the contents of the present number of this popular quarterly.

J. B. McC.

The Practical Medical Series of Year Books. General Surgery. Edited by John B. Murphy, M.D., Professor of Surgery, Northwestern University Medical School. Year Book publishers, Chicago, U. S., 1902. Vol. 2.

After carefully examining this book we can recommend it, and believe it will be found of great advantage to all busy practi-

tioners. A wide range of surgery has been faithfully surveyed, and good abstracts of many valuable papers which have appeared in the surgical literature of the year have been presented. Excellent digests have also been given on important subjects by the editor. His *résumé* on appendicitis is particularly interesting, and this important disease is handled in no uncertain manner. A study of the pathology is made to indicate clearly that operative treatment is the only safe and rational practice. One is told that safety lies in early surgical intervention, and not as a *dernier resort*. The question: Should cases of general suppurative peritonitis be operated upon? must be answered by "yes." If no evidence of intense toxæmia and collapse, the quantity of pus and extent of infection do not count against operation. The non-operable cases are those where there is present meteorism, intestinal paralysis, projectile vomiting, cold and clammy extremities, anxious expression and low pulse tension. The article on diseases of the upper extremity is most interesting and important. Carl Beck's valuable paper is epitomized in which the importance of using the X-rays for diagnostic purposes is urged in all injuries in the neighbourhood of the wrist joint. Beck reports in his paper 104 cases of fracture of the carpal end of the radius (Colles fracture) which he had examined with the X-rays; 21 of these cases showed fracture of the head of the ulna as well. He points out the importance of an accurate knowledge of the exact lesion, and he maintains that frequently the X-rays is our only means of settling whether a given case is to be treated by immobilization or by massage.

F. R. E.

PUBLISHERS DEPARTMENT.

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Very truly yours,

C. W. PRICE.

CANADA MEDICAL RECORD

AUGUST, 1902.

Original Communications.

GYNECOLOGICAL CASES.

AT THE SAMARITAN HOSPITAL FOR WOMEN, MONTREAL.

Under the care of A. Laphorn Smith, M.D., Surgeon-in-Chief of the Samaritan Hospital; Gynecologist to the Western Hospital; Gynecologist to the Montreal Dispensary; Professor of Gynecology in the University of Vermont, Burlington; Professor of Clinical Gynecology, Bishop's University, Montreal.

The following cases, although of no particular interest on account of rarity, are worth while reporting, because they are just the ones which are constantly coming under the care of the general practitioner, by whom indeed many of them were sent to the hospital.

On the first of January, 1902, there was admitted Miss T., who had come to my office a week before, complaining for two years of pain in her back and side, which prevented her from earning her living. On examination I found a large mass on one side of the pelvis and a smaller one on the other side. I diagnosed pus tubes, and possibly that the appendix was involved, as she had greatest tenderness over MacBurney's point. After the usual preparation, including three hot baths and strychnine and laxatives until the bowels were thoroughly emptied, the abdomen was opened; there were no adhesions of the bowels, and without any difficulty I enucleated a pus tube as large as an orange from Douglas' *cul de sac*. The ovary on this side was so densely connected with the tube that I removed the whole of it, but the ovary on the left side was not so much involved, so only three-quarters of it was removed with

the tube, which was hard and swollen, and closed. The quarter of an ovary was allowed to remain, as she was only twenty-four years of age, and was engaged to be married. She made an excellent recovery and was hard at work in a wholesale millinery store seven weeks after, and has had no pain or inconveniences of any kind since.

On the second of January Mrs. M. was admitted for cystitis; she was a working woman exposed to cold; she was kept in bed for one week on Buchu tea, hot lemonade and hot douches, with the result that she was quite cured, and has had no return of it since.

On the fifth of January Mrs. McN. was sent by Dr. Sharpe for a femoral hernia, for which she had been wearing a truss for fifteen years until there was a raw ulcerated surface the size of a silver dollar. Some of the staff raised the question whether it was safe to open the peritoneal cavity in the presence of an ulcerating surface on the skin. I might mention here that this never debars me from operating, as I have absolute faith in my ability to disinfect even such a surface with permanganate, oxalic acid and bichloride of mercury. The sac was found and the ring formed by Gimbernat's ligament and Poupart's was divided; the sac was opened; the bowel, which was adherent, was replaced in the abdomen, the sac was tied off and the femoral ring closed by four interrupted chromicized catgut stitches, one of which lasted so long that it was thrown off by nature three months later, without, however, causing much inconvenience. She has been working hard ever since, keeping a grocery store and supporting nine children. I might also add that I have done more than fifty hernia operations, inguinal, femoral, omental and ventral, every one of which has been a perfect success, some of them on quite old women, and all of them wearing a truss and incapacitated from doing hard work until they were operated on, since which they have been completely cured.

On the 7th January a Mrs. B. came in for metritis; she had had double hydrosalpina removed five years before by me at the Western hospital, since which she has been troubled off

and on with digestive troubles partly due to intestinal adhesions, but also to excessive eating. She was relieved by hot douches.

On the 8th January Mrs. W. W., aet. 24, came in for retroversion with fixation, which always means diseased tubes. She suffered intensely at her periods and also from dyspareunia, which caused great unhappiness in her home; she had never experienced any sexual feeling, as her trouble dated back since she was a young girl working in a factory for long hours. As both tubes were closed and the ovaries were hard and cystic, and I was anxious that she would not have any more periods, I removed both ovaries, and did ventrofixation, using two silk-worm gut stitches. Her nervous system was completely shattered so that it was several months before she was quite well, her convalescence being retarded somewhat by the buried stitches causing a sinus, which necessitated their removal. She is now in good health and lives very happily with her husband, her sexual feeling having appeared soon after her operation and being stronger than the average ever since. I mention this because there is a general opinion that sexual feeling is lost by removal of the ovaries, while our experience here has been quite the contrary.

Mrs. H. W., a sister-in-law of the previous patient, also came on the 8th January, principally for dyspareunia, which was so severe that she had made up her mind to leave her husband, as married life caused her such torture. I had already treated her for nearly a year, during which time I repaired a lacerated cervix, which was immediately followed by pregnancy and confinement in due course, but she continued to suffer so much with menstruation and intercourse that I believed that I was justified in removing the ovaries. The result has been most satisfactory; a perfect convalescence and a happy home ever since. These two patients and their husbands are most grateful.

On the 13th January Mrs. R., aet. 34, was sent by Dr. Carmichael, principally for sterility. There was a long conical cervix, and the uterus was retroverted, but easily replaced. The cervix was amputated, the uterus curetted and

the round ligaments were shortened. The uterus is well up, but she had a little trouble with one buried silk-worm gut stitch which worked its way out two months later. So far she has not become pregnant, although many other Alexander cases have done so. Patients attach so much importance to this little inconvenience, quite forgetting that the operation has restored them to health, that I now feel very loath to leave any buried non-absorbable ligatures, preferring to use chromacized catgut.

On the 15th of January three patients were admitted. A Mrs. B., 29 years of age, came to the Montreal Dispensary, stating that she was obliged to earn her own living, as her husband had deserted her three months before, and that for two years she had been suffering almost constant pain in her ovaries, which was worse at her periods. I removed them a few days later, and has been heard of since much better.

Mrs. S. had her tubes and ovaries removed two years before for large pus tubes, from which operation she made a very good recovery, so that she was able to work as cook in a large boarding-house. She came in for a week's rest, and then returned to her work, and I mention the case because there is a popular impression that a woman is never good for much after a laparotomy. I could recall several hundred cases to prove the contrary.

Mrs. G., age 50, the mother of eighteen children, was the third case admitted that day. A few days later she was operated on for piles, which were very large, and which I removed by the method I always employ: a Whitehouse operation by which the whole of the pile-bearing area was removed, after tying off in four segments; and then the mucous membrane of the rectum was united to the skin with a running black silk stitch. The result was all that could be desired; she has been seen since and has no trouble. We take care in all cases of piles to keep the bowels liquid with compound liquorice powder.

On the 20th a Miss A. came in for a week's rest. She had had fixation of a floating kidney two years before, but

had to work very hard ever since, and never got into robust health. She was able to go back to her work in the factory.

On the 23rd a Mrs. J., 38 years old, came in and was curetted for menorrhagia by one of the staff, but a week later bleeding began again; so at the request of her physician I curetted and applied equal parts of Churchill's iodine and carbolic acid, and then removed a large lacerated and everted cervix. The effect on her general health was excellent, and a few weeks later she became pregnant, which is a good proof of the benefit of the operation, as she had had no child for ten years before.

On the 29th January a Mrs. B. was sent in by Dr. Harvey for symptoms of tubal pregnancy, but after watching her for three weeks we decided that it was a normal pregnancy.

On the same day a Mrs. W. was sent in by Dr. Deeks for symptoms of tubal pregnancy, but after careful observation I came to the conclusion that the irregular hemorrhage and pain were due to some other cause, which was treated, and she is now well. These two gentlemen deserve the credit of being on the lookout for tubal pregnancy. I am sure that no case of this disease could escape their notice.

On the 31st of January Mrs. S., aet. 42, had been in before sixteen months ago when she had dilatation, curetting lacerated cervix and complete laceration of perineum operations, which were most successful. She also had Alexander's operation on the round ligaments, which, although successful in keeping the uterus up, did not relieve her pain. So I decided that I would open the abdomen and look for adhesions, which were found and freed, and one cirrhotic ovary was removed and the uterus fixed to the abdominal wall. She made an excellent recovery, and is now working as general servant, at very hard work.

This comprises all the cases admitted in January, 1902. In my next article I will report an interesting series of cases operated on in February.

Selected Articles.

THE ILLNESS OF THE KING.

The *Lancet* (London), of July 5, writing upon King Edward's illness, says : The present condition of His Majesty the King and the future progress of his health can be gauged best by a full consideration of the case from the very beginning. Our readers will be able to follow the thread of our remarks if they read in connection with them the brief account of His Majesty's illness which appeared in our second edition last week, and which we reprint below. Firstly, was there any condition present which might predispose to the developments of perityphlitis? Although no reference appears to have been made to it, it is far from unlikely that the severe attack of typhoid fever from which the King suffered in 1871 may have had some etiological connection with his present illness. The ulceration of the bowel in typhoid fever is especially severe near the ileo-cecal valve, and adhesions occurring as a result of the intestinal ulceration, especially when the attack has been prolonged, are not uncommon. Adhesions of this nature are liable to produce displacement and torsion in the neighbourhood of the cecum, and it is now recognized that in this way the circulation may be distinctly interfered with, and that such disturbances of position and circulation are important predisposing causes in the production of perityphlitis. So that it is quite possible that the attack of enteric fever from which the King suffered more than thirty years ago may be really connected with the illness from which he is suffering now.

The present attack appears to date from some ten days earlier than the operation. For it was on June 14 that the King first complained of abdominal discomfort, but it was slight, and did not interfere with the journey to Aldershot. At midnight of the same day abdominal pain came on, and Sir Francis Laking was summoned and was able to relieve the urgency of the symptoms; and on the next day, June 15, His Majesty was seen by Sir Thomas Barlow. Up to this time the signs and symptoms were indefinite, and though they were sufficient to suggest the possibility of perityphlitis, no trustworthy diagnosis could be made. On the afternoon of the 15th a chilly fit occurred; this was in all probability a real rigour, and marks the time at which, from the after-history of the case, we may conclude that suppuration com-

menced. We may interpret these symptoms by the light of our later knowledge as follows: The commencement of the perityphlitis dates from the first abdominal discomfort of which the King complained on Saturday, June 14. It may have been connected with the great fatigue of the previous day, and the taking of a late supper; but it is quite possible that neither had anything to do with it. During Saturday and Sunday the inflammation extended and set up an adhesive peritonitis. To this was doubtless due most of the pain of which the King complained. Then pus began to form around the cecum. This suppuration was localized by the adhesions which had already formed between the adjoining coils of intestine, and if our suggestion be correct as to the influence of the attack of typhoid fever, old adhesions remaining from that illness may have assisted in confining the suppurative process. By Monday, June 16, the King had recovered sufficiently to bear well the drive to Windsor, for he arrived there without fatigue. On Tuesday signs began to appear which rendered certain the nature of the affection, and when he was seen on Wednesday, June 18, the local manifestations were well marked. In the right iliac fossa there was a well-defined, somewhat firm swelling, with distinct tenderness, but no very marked pain independently of pressure. The temperature was raised and the diagnosis could be made with ease and certainty. Then would arise the question of operation. There are some in this country, and still more abroad, who advocate operative measures at the earliest possible moment, but by indiscriminate operation in all cases, without regard to the exact nature of the local condition, the best results are not obtained. It cannot be disputed that a large number of cases of perityphlitis recover without surgical aid, and that many others result in the formation of a localized abscess which may be evacuated without necessarily disturbing the cecum, without, indeed, it ever being established that inflammation in its vicinity was the cause of the trouble. The great danger in perityphlitis is general septic peritonitis. What may be called the "natural" method of prevention of this complication is by the formation of peritoneal adhesions, shutting off the focus of infection from the rest of the peritoneal cavity. To attempt to disturb the cecum while this process of localization of the suppuration is going on, can only lead to the hastening of the evil which it is desired to avert, for the breaking down of the protective adhesions will almost

certainly cause the generalization of the peritoneal infection. There is the less need to discuss the question of the superiority of early or late operation, seeing that we have no proof in the King's case that the appendix was inflamed, but we may be permitted to express our complete approval of the course adopted by His Majesty's medical advisers.

With complete rest on Thursday, Friday and Saturday the King's condition improved, the temperature fell to normal, and he felt better in himself, and the improvement continued during the Sunday so that on Monday His Majesty was able to journey to London by train. Up to Monday, June 23, it had been hoped that care and rest had served the patient so well that the necessity for active surgical treatment had passed away. This was only in accord with the earnest wish of the King, who was extremely anxious to carry out, at whatever pain to himself, the arrangements that had been made. On Monday, however, the probability of the presence of pus in the right iliac fossa was suspected, and on the morning of Tuesday, June 24, it became clear that suppuration had occurred. The iliac swelling was again obvious, the pain had increased, and the temperature was once more elevated. All these signs pointed clearly to the formation of a localized abscess. The danger of delay was great. The formation of pus was evidently proceeding rapidly, and the abscess was extending. In such circumstances the impossibility of sanctioning any attempt at carrying out the coronation ceremony was at once obvious. Nay, more, the necessity for the immediate evacuation of the pus was urgent, for if no outlet for it were provided the far greater danger of general septic peritonitis was imminent, a condition in which surgical interference is too often of small avail. Lord Lister and Sir Thomas Smith agreed that an operation was imperative, and the King gave his assent reluctantly, not because of the pain or the risk to himself, but because he knew the severe disappointment the change of plan would occasion to the many thousands who were assembling in honour of his coronation.

To Sir Frederick Treves was committed the heavy responsibility of performing the operation. An incision was made a short distance above Poupart's ligament on the right side; the wound was steadily deepened, but it was not until it had obtained a depth of some four and a half inches that pus was reached. This was evacuated, and the abscess cavity drained by means of two rubber tubes. By the evacuation

of the pus and the subsequent drainage the immediate risk of the involvement of the general peritoneal cavity was averted, and thus the danger of the disease was greatly reduced. The effects of the operation soon showed themselves. The pain from which the patient had suffered severely was markedly relieved, the temperature rapidly fell, and it was evident that the septic absorption had ceased. It was possible for his medical attendants to announce on the same evening that the King's condition was as good as could be expected after so serious an operation, that his strength was well maintained and that the pain had diminished. There was an addendum to the effect that it would be some days before it could be said that the King was out of danger; this was a necessary warning to the public, for it may happen that the extension of the suppurative process does not cease with the evacuation of the pus.

During the earlier part of the first night after the operation His Majesty was restless and did not sleep, but after one o'clock some sleep was obtained. A fairly comfortable day followed and but little pain was experienced except at the dressing of the wound. His strength was fairly well maintained. On the second night he had some refreshing sleep, and he improved in all respects, and the state of the wound continued satisfactory. On Friday, June 27, it was announced that a fair night had been passed, and that the temperature remained normal. On Sunday, the fifth day after the operation, the King was sufficiently recovered to permit his being moved on to a couch for a few hours, and up to the time of writing the improvement has steadily continued. A fair amount of sleep is obtained, the King's strength increases, and the wound continues to progress in a satisfactory manner. It is, of course, most important that the abscess cavity should close completely, and from the bottom; otherwise an intractable sinus would be not unlikely to result. The wound is, therefore, packed with gauze, and this necessarily occasions no small amount of pain. This is unfortunate, but cannot be avoided, and it is consoling to remember that the pain will decrease with each dressing.

We have followed the illustrious patient's progress from the commencement of his illness to the present time and we are now in a position to consider the prognosis. The dangers which may arise may proceed from the patient's constitution, or be connected with the local lesion. As to

the King's general constitution there is but little cause for anxiety. At his age, sixty-one years, he is probably as strong as the average of his subjects, and, apart from the harassing nature of his duties and the energy and zeal with which he has ever undertaken all that he is called upon to do, there has been nothing materially to impair his general health. The severe attack of typhoid fever in 1871, to which we have already alluded, served for a time to weaken him, but the effect was transient. It cannot, however, be doubted that the grave disappointment which the King feels at having to postpone the coronation may exert some depressing effect on him. To dispel as far as possible any untoward mental or sentimental condition must be the best endeavour of those around his bedside. Turning to the local conditions, we find several possibilities of harm. The wall of the abscess cavity is formed by coils of small intestine, which have become adherent owing to adhesive peritonitis; some of these adhesions have probably already commenced to organize. Somewhere in this wall there may be a peccant appendix matted to the intestine by exuded lymph; from it and from the other parts of the wall of the abscess cavity pus may be still secreted. The chief danger is the extension of the suppurative process to the general peritoneal cavity, but day by day the adhesions localizing the mischief are growing stronger, organization proceeds rapidly and before long they will be strong enough to resist any strain to which they may be subjected. The danger from this cause has steadily grown less and less with every favourable bulletin. Again, the risk of the absorption of septic products from the abscess cavity is now very small, as all tension has been removed and the granulations which have formed offer an effective resistance to the passage of the toxins into the blood-vessels and lymphatics; at any rate, the state of the temperature shows that now no absorption is taking place. The chance of the occurrence of general septicemia may be disregarded. On the critical view of the situation of the King it may be said that there is great promise of a speedy and safe recovery from his illness; speedy, we say, though many weeks must elapse before he is well, for we must bear in mind the severity of the illness and of the operation performed for its relief; and safe because the probability of any complication supervening is remote. On the maintenance of his strength, apart from care in dressing the wound, depends mainly the recovery of His Majesty.

One further point requires consideration. If, as we may not unreasonably hope and expect, the King recovers from his illness, will a recurrence be likely or will it never be necessary to interfere with the appendix? The answer which would be given by those surgeons who have had most experience in abdominal surgery would surely be "No." When an abscess has developed in connection with the appendix and has been successfully drained, it is rare, indeed, for any recrudescence of mischief or for any further operation to be required.

THE VALUE OF AN OCCASIONAL CONVULSION IN CERTAIN CASES.

BY WILLIAM P. SPRATTLING, M. D.

Medical Superintendent of the Craig Colony for Epileptics, Secretary of the National Association for the Study of Epilepsy, etc.,
Soneya, N. Y.

It is hard to imagine anything more contradictory on its face than to say that a convulsion could ever be of value; yet I am convinced that such is sometimes the case, for two classes of individuals have come under my observation in which occasional convulsions were productive of good. The first includes epileptics in which prolonged periods of mental disturbance or insanity are prevented through the occurrence of a fit; the second, selected cases of insipient alcoholism in which a persistence in the drinking habit would probably lead to confirmed epilepsy, were it not for the emphatic warning given by the convulsion.

Epileptics of a certain type make up the first class, and includes those in which the disease seems dependent on fluctuating internal causes; on the action of certain toxins as yet unisolated, and but little understood, and which grow in intensity until a limit is reached, when their toxicity is in some manner neutralized or destroyed by a convulsion, only to repeat again and again the same process of development, growth and decadence, the latter occurring each time as the result of one or more epileptic convulsions. These periods of exacerbation are not, as a rule, fixed in time, although I have seen a few cases in which there seemed to be some evidence of periodicity.

Epilepsy generally manifests itself by a sudden and more or less appreciable discharge of nervous energy in some part of the brain, and we know that experimental epilepsy may be produced in the lower animals in various ways, as, for in-

stance, by the application of electricity to the brain cortex, and by introducing certain substances into the circulation, such as ammonium carbammate, alcohol and other toxic fluids. Now the action of toxic substances introduced from without is not essentially different from those produced within, and, relatively, they are of importance to the individual only in so far as he may or may not have power of control over them. In the former cases, those in which toxic agencies are introduced from without, his control over them may reasonably be assumed to be absolute, *i. e.*, he may introduce them or not, just as he chooses; while in the latter, in the case of agencies having a like action and generated within, he may or may not be able to prevent their origin.

When a man who is well along in years begins to drink and has a convulsion as the result, he had better let alcohol alone at once, for that convulsion meant an emphatic protest on the part of the brain that it cannot be subjected to such evil influences without the risk of pronounced injury to the general welfare of the individual. All amateur alcoholics would not have such a warning, and only those who suffer a constitutional loss of resistance on the part of the nervous system to the action of alcohol, especially need it, and such individuals ought to admire the wisdom of Nature in providing it.

In some cases, perhaps in most of them, a convulsion, after all, may be regarded as only a protest on the part of Nature against the presence of an irritant of some kind in a part of the body where it ought not to be, and it only remains for science to locate and determine the nature of the irritant.

A man of 40—the exponent of an eminent calling—an athlete in proportion, strong, vigorous, robust, and in every respect the picture of health, consulted me some five years ago for what he called “fainting spells.” A thorough examination of his condition left me at a loss at first to account for his convulsions, but on close questioning he shortly admitted occasional over-indulgence in strong drink at times when “good fellowship was being put to the test.” I warned him earnestly; told him that as often as he applied the match, just so often would the powder probably explode; but he was unable at first to quit the practice, and about every two months, for a period of two years, he would have one and sometimes two well marked convulsions after his periods of dissipation. Finally—being a man who often spoke in public—he had a very marked convulsion in a

place and manner that embarrassed him exceedingly, but which had the salutary effect of bringing him to his senses, for after that he submitted to proper treatment, abstained from further indulgence in alcoholic drink, and for three years now has not had a convulsion. This man stood in danger of sooner or later becoming a confirmed epileptic; not because there was any distinctive cause in his condition capable in itself of producing epilepsy, but because there was in him an inherent tendency to convulsions which would only appear under proper excitation, and which, being forced to appear a sufficient number of times, would give rise to a condition that might continue to create them independent of the action of an immediate excitant.

Such convulsions, once established, are termed "Habit Epilepsy," and they express conclusively the power of education possessed by the central nervous system.

In the second class of cases in which an occasional convulsion helps to preserve the mental life of the patient, it is far more difficult to determine and remove the cause. In many of them the convulsion seems to come as the termination of an obscure auto-toxic cycle that varies in duration in different individuals and that bears some similarity, in its upward period, at least, to the "Folie Circulaire" or the Circular Insanity of the French. It seems evident that the specific cause of the fit in these cases is something that permeates the entire organism; something that comes and goes, causing a sort of Psychic tide that rises and falls; that grows and develops in intensity, exerting a pernicious influence on the daily life of the patient by making him do and say things not in harmony with his normal state, which abnormalities the patient will exhibit in proportion to his powers of inhibition, until the limit is reached and the mind loses its direction and control. The powers of further inhibition finally being destroyed, the nervous storm breaks with great force and violence, the poison is neutralized or destroyed, equilibrium is restored, and all is quiet and serene once more.

A fairly typical illustration of this class, in her own language, by E. M., an intelligent woman of 43, and now a patient at the Craig Colony, is of interest.

"This is now the 22nd of February, 1902. I had four very severe attacks on the 31st of last January. I felt the attacks coming for a long time before they came. I was exceedingly nervous and irritable; things did not go right.

I scolded about everything, and was unable to hold things in a proper manner. When I picked up my brush and comb I would drop them, and when I walked I stepped crooked—one foot would keep making mistakes, and I didn't know which foot it was. They said it was the left. I could not sleep at all. I lay thinking of things that had happened and that was not pleasant. I tried to put them out of my mind by thinking of what I had read. I like history, and I tried to think of some character in English history about which I had read. I have a strong will and feel that I can control my thought at most times, but for days before the attacks come on I am unable to do so. They go off about everything, and I try to make them come back, but they won't. They get worse every day and night, and, finally, they all get jumbled up together and I don't know anything. Then the attacks come on and after that I am all right—everything clears up and I see things as they really are. I lose all my nervousness and can act naturally."

The same psychic phenomena are witnessed in insane epileptics, who are prone to show indications of an approaching seizure. "In asylum life," says Bevan Lewis, "amongst the intelligent class of nurses the fact is universally recognized that a premonitory stage of great irritability is often seen, and the effect of a convulsive attack will be to clear up the mental atmosphere." In our experience, delusions, hallucinations and illusions are very rare in the average epileptic, sane or insane, during the inter-paroxysmal period, but are more common during the pre-paroxysmal stage, nearly always disappearing with the fit. Personally I come in contact with large numbers of epileptics at regular times each week, and it is easy to detect psychic evidences of an oncoming attack, in many cases days and even weeks before the attack occurs. Such cases would seem to offer an inviting field in which the comparative study of living matter in the most comprehensive manner, during, as well as between, the periods of disturbance that culminate in convulsions, might be pursued to advantage; and especially do they emphasize the necessity for studying and treating the epileptic *strictly on an individual basis*.

Nor is it enough now to speak simply of epilepsy, for our knowledge of its manifold types and causes would seem to require that we make every effort to be more specific and define which one of the epilepsies we may have under consideration.—*Albany Med. Annals*.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

TINNITUS AURIUM.

This annoying and persistent symptom is dependent upon a variety of conditions. In the experience of many otologists, nearly as many patients apply for treatment for this condition as for impaired hearing. The relief of deafness is often easier than the abatement of subjective noises. A classification of the symptoms should relate to the underlying conditions, but this is impossible. The following may be regarded as a convenient provisional arrangement :

1. Conduction sounds or noises due to occlusion or impaired mobility of some portion of the sound-conducting apparatus.

2. Blood sounds or noises produced by the blood-current in vessels in or near the ear, and due either to disturbance of the local or general circulation, and to abnormalities in the size, shape or position of the vessels.

3. Labyrinthine sounds or noises due to alterations in the pressure within the labyrinth.

4. Neurotic sounds or noises due to increased irritability of the auditory nerve.

5. Cerebral sounds or noises due to lesions of the auditory centers in the cerebral cortex.

In the search for these various causes, evidences of disease in any portion of the conducting apparatus should be carefully looked for by a thorough physical examination. The history of the case should be obtained and an accurate description taken of the character of the sound. A careful functional examination should be made, and diseases of other organs or the digestive tract, or circulatory disturbance, should be looked for. In addition, the effects of certain drugs in relieving or aggravating the tinnitus should be noted.

A physical examination of the ear is never to be omitted, because any lesion of the conducting apparatus is an impor-

tant contribu- factor to the production of tinnitus. From the patient we can learn the character of the noises, whether unilateral or bilateral, simple or elaborated, constant or intermittent, pulsating or uniform, and the pitch. The latter is of importance, for, generally speaking, low sounds suggest tympanic and high sounds labyrinthine involvement. The pitch is best determined by holding a tuning-fork, 256 D. V., opposite the patient's ear and requiring him to decide whether the pitch of the subjective sound is higher or lower than that of the fork.

The length of time during which tinnitus persists is of some importance, as sounds of tympanic origin rarely persist for a great length of time. The subjective noise persisting constantly from childhood to adult life suggests an anomalous position of the vessels. Elevation of the lower tone limit suggests tympanic disease, while the lowering of the upper tone limit points to labyrinthine disturbance.—Philip D. Kerrison, *Laryngoscope*.

TREATMENT OF GASTROPTOSIS.

A lengthy article upon the displacements of the stomach, together with a discussion of the diagnostic criteria, is concluded by some excellent remarks upon treatment. Tight lacing and heavy clothing hanging from the waistbands should be forbidden. Clothing should be supported from the shoulders. The patient's habits should be rigidly scrutinized. Rest for at least an hour after meals, flat upon the back, with the clothing loosened, is a useful measure. Food should be taken in small quantities and should be digestible and adapted to the gastric secretions. A diet applicable to all cases cannot be given, as the amount of food is dependent upon the amount of hydrochloric acid secreted, and this is largely determined by the presence or absence of dilatation. Two measures are to be insisted upon, namely, that the food shall not be too great at one time, and that there shall be a period of rest after each meal. Lavage is not required unless retention demands it.

The stomach is to be held in place by a belt or abdominal bandage, so as to exert pressure from below upward and backward; the ordinary elastic supporter is best for the purpose. A simple binder is usually not sufficient. The lower edge of the belt must be firmly held against the pubis by perineal bands. If this counter-force is not employed, the belt invariably slips upward, and the satisfactory effects

of upward pressure cannot be obtained. Pads are useful in connection with the belt; they should be from three-fourths to one and three-fourths inches in thickness, so placed as to exert upward pressure. Such a pad may be advantageously placed below the displaced pylorus. In total descent it is well to employ two pads parallel to and a little above Poupart's ligament. Without pads it is rarely possible to restore the stomach to its normal position. In cases where the abdominal walls are thin, it is difficult to exert sufficient upward pressure by a belt alone, and in such individuals the pads are indispensable. Any apparatus for retaining the stomach cannot be shown to be satisfactory until the organ is shown by inflation to be in its normal position when the apparatus is in place. The belt should be snugly fitted and worn fairly tight around the hips, while the upper border should be loose. The proper application of such a belt is shown by almost instant relief of the symptoms. Such an apparatus, however, does not produce a cure. It only aids the stomach wall in recovering its tone.

Operative measures in this condition are advised hesitatingly, as it is impossible to state of what value they may be in permanently relieving the condition. Until such time as the indications for operation are more clearly defined than at present, it is wise to restrict the surgical treatment of the condition to those cases in which the symptoms are clearly traceable to peritoneal adhesions, or those which are not amenable to more conservative measures. When the trouble is aggravated by a relaxed pelvic floor this should be remedied, and where there is much separation of the recti Webster's operation is to be recommended.—J. D. Steele, *Philadelphia Medical Journal*.

TREATMENT OF RINGWORM.

At the Vanderbilt Clinic, in which a large number of cases of ringworm are treated every year, a preparation composed of one drachm of crystals of iodine to an ounce of goose grease has proven to be the most effective remedy. It is applied twice a day until it produces a reaction, as shown by a little swelling of the patch; then once a day is sufficient. In two or three weeks the hair falls from the patch, but it grows again, after which the affected area is restored. The first application of the remedy may cause a little pain, but this lasts only a few moments, and even children do not complain. When used upon the bearded portions of the

face, the applications are more painful than when the scalp is the part treated. If such reaction occurs the remedy can be suspended for a day or two, substituting some bland ointment. Many cases of ringworm of the face have been cured in three weeks. The goose grease is regarded as an essential in the preparation of the ointment, and this is sometimes difficult to obtain, as commercial samples of goose grease are often made from other fats which have a low melting point.—G. T. Jackson, *Medical Record*.

URIC ACID FALLACIES.

Dr. Frank Billings, of Chicago, thus sums up from medical literature the theories concerning uric acid, gout and the morbid conditions which occur co-incidentally with gouty states:

1. Uric acid probably does not exist in the blood in health.

2. Uric acid is probably formed in the kidney from two sources: (a) From urea interacting with some antecedent of urea, probably glycocine in the kidney. The large amount of uric acid excreted by birds and reptiles and the presence in the blood of these animals of urea, and not uric acid, points rationally to this source of uric acid in these animals, and it is rational to infer that a part at least of the uric acid excreted by mammals, including man, is formed in the kidney in this way. (b) From the nucleins of the body by oxidation probably in the kidney.

3. That uric acid is not poisonous. That the presence of uric acid in the blood as the quadriurate or biurate probably means it has been absorbed from the kidneys.

4. That defective kidneys are the cause of the accumulation of urates in the blood because of insufficient excretion.

5. That antecedent kidney disease is commonly formed in so-called lithemic states which have often been attributed to the irritating effects of uric acid upon the kidney capillaries and the cells of the tubules.

6. That the lesions formerly attributed to uric acid are probably due to the toxic effect of the alloxuric bases.

7. That the presence of these lesions in the kidneys and in the connective-tissue elements of the body leads not only to accumulation of the urates in the blood, but also furnishes a proper condition of tissue for the deposition of the urates as concretions in joints and fibrous tissues.

8. That the degree of alkalinity of the blood has no influence upon the presence of the urates in the blood.

9. That the deposited biurate concretions cannot be redissolved out of the tissues by an attempt to increase the alkalinity of the blood and fluid by the use of alkaline medication.

10. That the presence of concretions of the urates in the body comprises the sum total of its pathologic effects.

11. That the so-called uric acid diathesis, the influence of heredity, the bad habits of life, alcoholic indulgence, lead poisoning, etc., consists in a condition or tendency to disintegrate a quantity of neuclein far in excess of the amount usually split up, with resulting increase of uric acid and alloxuric base formation.

12. That the condition of the urine as to the presence of uric acid is in single specimens not indicative of the blood state in relation to the presence of urates.

13. The chemical reaction of the urine bears no relation to the presence of uric acid in the urine and blood, nor does it indicate the chemical reaction of the blood.

Some of the fallacies of uric acid are therefore:

1. That uric acid is toxic.
2. That it is a causative factor in any disease except gout.

3. That "uricacidemia," meaning acid blood, does not exist.

4. That the chemical reaction of the blood may be altered by the use of medicinal quantities of the alkalies or by diet.

5. That uratic deposits may be dissolved out by the administration of alkalies.

6. That lithia is a uric acid solvent of unusual potency.

7. That uric acid is an abnormal constituent of the urine.

8. That an excess of uric acid in the urine at one time, or a deficiency at another time, indicates an abnormal condition in reference to uric acid.

9. That rheumatism is due to uric acid.—*Northwestern Lancet*.

THE TREATMENT OF PNEUMONIA BY ANTIPNEUMOCOCCUS SERUM.

Sears (*Boston Medical and Surgical Journal*, December 12, 1901, *Maryland Medical Journal*) reports twelve cases of lobar pneumonia treated by the antipneumococcus serum, the effort being made to select only those cases of which treatment seemed likely to modify the outcome, thus excluding those in which death seemed practically inevitable, and also those whose age or general condition made recov-

ery highly probable. An attempt was also made to select only those cases which entered the hospital early in the course of their illness, although this requirement could not be rigorously fulfilled.

Other measures were not excluded, and cold sponging, oxygen inhalation, salt infusion and various stimulants were used in the cases when their administration seemed desirable. Eight of the twelve cases were over thirty years old; of the other four cases, one was excessively alcoholic, and two others confessed to its moderate use.

Of the eight cases over thirty years of age, three used alcohol to excess, two others had mitral regurgitation and nephritis, and one arteriosclerosis. Albumen was found in the urine in ten cases, in four in considerable amount.

Three patients died, i.e., the mortality was about the same as the usual hospital rate of all patients with this disease.

In the nine recoveries the temperature returned to normal, in one of the fifth day, in one on the sixth, two on the seventh, three on the eighth, and two on the ninth. Thus the serum treatment did not seem to shorten the course of the disease, and the only conclusion that can be drawn in this connection is that the course of the disease is not lengthened.

The treatment, according to Sear's experience, is certainly no specific against the pain resulting from the inflamed pleura, and "yet it seemed, even in the fatal cases, that the patients were peculiarly comfortable" under its use.

It was impossible to assert that the injections had any effect upon the fever in these cases.

No ill-effects, except occasional skin eruptions, with pain and swelling of the joints, were met with. "A great practical objection to its use is our ignorance of the strength of the serum and the consequent inability to measure the dose."

Taking all things into consideration, however, the unfavourable character of the material, and the fact that in but four cases the injection was given before the third day, Sears concludes that the results of the use of the serum in these twelve cases justifies a further trial of this form of treatment.

SPEECH AS A FACTOR IN THE DIAGNOSIS AND PROGNOSIS OF BACKWARDNESS IN CHILDREN.

G. Hudson Makuen. (*Journal American Medical Association*, October 12, 1901. *Maryland Medical Journal*).

The subject of this paper is one of more than usual im-

portance. The expression "backwardness in children" has a rather indefinite scientific meaning. According to the common acceptance of the term, the backward child is one who is below the average intelligence of children of the same age. A more scientific definition would make the term "backward child" mean one who is not living up to his own possibilities or capabilities. In the present paper Makuen regards backwardness as a disease.

The diagnosis of backwardness is not difficult. All children who do not, cannot or will not keep up with their classes must be regarded as backward and should have careful attention. The object of Makuen's paper is to consider to what extent a study of the speech of children will aid us in a diagnosis. Freedom of speech is an absolute essential to the normal development of children, and defect of speech, however slight, makes an impress on the child's mentality and prevents him from doing all that he would otherwise be capable of doing. The author cites several cases in point.

A young man, aged nineteen years, was regarded as an imbecile. He could not speak, read or write intelligently; his expression was vacant and staring. His speech was wholly unintelligible. His whole mental condition was thought to be due to his lack of power of expression. On examination it was found that the patient had a defective tongue. The genio-hyoglossus muscle was too short, and bound the tongue down to the floor of the mouth. A simple operation was performed to give a free tip to the tongue. A systematic course of training for the purpose of using the tongue followed for about one year. The imbecile youth soon became one of the leading business men of the city.

From a study of a series of similar cases he draws the following conclusions:

1. It is not always possible to determine at a glance the cause of backwardness in children.

2. Backwardness in children is not always due to a central lesion, but may be the result of arrested cerebral development, due to some abnormality of structure in the peripheral organs.

3. A very common cause of backwardness in children may be some abnormality of structure in the peripheral organs of speech.

4. So closely are the speech centers related to the ideational centers of the brain that any impairment of the one generally results in a corresponding impairment of the other.

5. The best method of arriving at even a proximately correct prognosis in case of backward children is to apply the speech test, or, in other words, to ascertain by careful study and experiment to what extent the faculty of speech may be impressed, and it will be found that in those who are susceptible to training in what may be called the refinements of speech are the ones for whom we may promise the best results, and that possibilities for general development will be proportional to the capacity for speech development.

TUBERCULOSIS.

Dr. B. K. Rachford in the *Archives of Pediatrics* for December, believes that the keynote of treatment of tuberculosis in infancy and childhood is to maintain nutrition by a proper diet. As the importance of nutrition becomes more and more paramount the younger the patient and in artificially fed infants, the problem presented is one of the greatest difficulty. Milk and cod-liver oil remain the foundation-stones of the treatment, and the next most important agents are fresh air and sunshine. The fresh-air treatment of tuberculosis is, he thinks, even more important in the infant and child than in the adult, and if faithfully carried out will give better results. He especially insists upon the great value of guaiacol in the treatment of tuberculosis in infancy and childhood, and believes that it far out-classes all other drugs in this condition. He recommends its use by inunction in the form of this prescription:—

R	Guaiacol.....	3	1
	Lanolin	3	4
	Lard	3	4

One level teaspoonful to be rubbed into the chest at bedtime each day. He has used this prescription for eight years in these cases in infancy and childhood, and is convinced of its great value. Guaiacol is one of the few drugs which, when applied to the skin, is rapidly absorbed by the lymph-channels and so carried into the general circulation. Its great value in the treatment of lymph-node tuberculosis in infancy and childhood probably depends on the fact that by inunction it can readily be brought into contact with the diseased lymph-nodes and so act as a lymphatic antiseptic. While of great value in children, it is of comparatively little value in adults, because in the first place the lymphatic glandular system is more active in the child, and in the second place adult tuberculosis is as a rule not that of the lymph-nodes. In acute tubercular conditions

he directs that a level teaspoonful of the ointment be rubbed into the skin over the abdomen and chest night and morning for ten or fifteen minutes, after the fever and symptoms have been controlled, then two or three times a week as long as may be necessary. In tubercular peritonitis the good results are equally evident, and when the active symptoms are in abeyance he frequently substitutes the carbonate of guaiacol internally for the inunction. A mixture of the carbonate and milk sugar is readily taken by children, and it is especially valuable in the treatment of intestinal and mesenteric tuberculosis.—*The Cleveland Medical Journal*.

THE OBSTETRIC FORCEPS: MAY WE NOT SAFELY USE THEM IN EVERY CASE OF LABOR? *

By FREDERICK LEAVITT, M. D.

CLINICAL INSTRUCTOR IN OBSTETRICS, UNIVERSITY OF MINNESOTA, OBSTETRICIAN TO THE CITY AND COUNTY HOSPITAL, FREE DISPENSARY, ETC., ETC.
ST. PAUL.

As long ago as the beginning of the 11th century, AVICENNA, that most celebrated Arabian physician, is said to have described the use of an instrument which could be applied to the head of the fetus and thereby aid delivery. Not until the time of the Chamberlens, however, more than 500 years later, was the modern forceps invented. For several generations this family of physicians kept the "art of delivering pregnant women in difficult cases by means of instruments" a secret, and it was many years after their death that models of the obstetric forceps were found in a secret room of Chamberlens' house. Since then improvements have been made from time to time, till now the forceps seem to fulfill every requirement.

When the forceps must be used, though an important theme for consideration, is a phase of the subject that I shall not discuss at this time. However essential it may be for one to know when the operation is imperative, at present I wish only to inquire how freely we may apply them. So then, putting to one side the accepted rules as to when forceps are demanded, let us consider when, if ever, their use is denied.

You will find that many of the rules laid down by distinguished obstetricians of a century ago were promulgated with the idea of discouraging the abuse rather than the

*Read at the 34th annual meeting of the Minnesota State Medical Society at Minneapolis, June 18, 1902.

conservative use of the forceps. It is stated that at one time instrumental interference was frequently had recourse to unnecessarily; that nature was seldom or never allowed to accomplish her object. The hand was constantly thrust into the uterus, instruments were employed to extract the child, and the rudest means used to bring away the placenta. Thus a great revolution was effected in the practice of the age, and obstetricians were taught to rely more implicitly on the power and beneficence of nature. DENHAM, who flourished during the first quarter of the 19th century, states in his work on Midwifery, that however cautiously applied, the evils arising from the unnecessary and improper use of forceps are so great that the world would doubtless be better off if no such instrument had ever been contrived for, or recommended in, the practice of obstetrics. A rule that he considered practical is stated thus: "The head of the child shall have rested for six hours as low as the perineum, that is a situation which would allow of their application, before the forceps are applied, though the pains should have altogether ceased during that time." A generation later we find obstetricians teaching more liberty in the use of the forceps. For example, in 1841, Ramsbotham wrote, "if the head have been locked for four hours, and made no progress for six or eight hours, without waiting the limited twenty-four hours, or even twelve, the forceps may be applied." Some of the indications for instrumentation as laid down by him were subsiding pains, failing strength, sinking spirits, anxious countenance, rapid pulse, rigor, great tenderness of the abdomen over the uterus, green discharges, preternatural soreness of the vulva, with heat and tumefaction of the vagina. Teachings that hold good to-day.

The statement was made in a recent article by Laphorn Smith, that while the forceps has saved the lives of hundreds, it has shipwrecked the lives of thousands. While I cannot believe this to be true, I do believe that many of the bad results accompanying parturition are wrongfully charged to instrumental interference.

Ever since the days of Israel, when Sarah, the patriarch Jacob's wife, perished at the hands of a midwife, medical history has been full of warnings; and, indeed, we are still far from always knowing when nature may be aided by art. It may properly be contended that the best success comes through conservatism, and that the physician who is inclined to apply radical measures in the treatment of his cases stands in danger of doing more harm than good. On the other hand, I dare say, many of us err now and then in allowing things to take their own course.

Writers and instructors of to-day, like those of old, have thrown into their teachings an element of precaution, while in their own practice they make use of the forceps with the greatest freedom. I have known this to be the case in some instances. Would it be safe to teach our students differently? This leads up to the inquiry, Does instrumental delivery add greatly to the dangers of labour? Are the complications and sequelae enhanced by the proper, or, to make it less exact, the careless use of the forceps? The point I aim to make is, that physicians *may* safely apply forceps in every case where time will permit, after the completion of the first stage of labour; that when this stage is over the obstetric moment has arrived when the patient may be placed in position and instruments employed with benefit.

The advanced stand taken in the practice of obstetrics must ultimately bring the art entirely within the realm of surgery. It is only when viewed from this standpoint that we note any marked progress being made in the past or towards which we may look for greater perfection in the future. In this age of cleanliness we dare do things that might not safely have been undertaken years ago. It is barely half a century since the blades of the forceps, in order that the patient should not be shocked by their metal clang, and that their introduction might be less likely to injure the parturient structures, were covered with leather and kept well lubricated with neat's foot oil. Could one imagine a more favourable nidus for bacterial growth outside a culture tube!

Personally it is my experience that where the forceps has been used no bad results have followed, neither in the immediate consequences to the soft parts, nor in delaying convalescence. In fact, it is frequently noted that the patient's strength is less dissipated, and the puerperal period passed with greater comfort, following instrumental aid, than when exhausted by tedious though spontaneous delivery. Of course it goes without saying that in many instances there is little demand for forceps, and, in fact, time will not permit of their application. But where the second stage has lasted long enough to make proper preparations for the operation, their use need not be delayed until some note of warning informs us of danger. At the City and County hospital it has been my custom to deliver nearly every case with instruments, and during a service of five years we have had no complications resulting therefrom. It may be claimed that obstetrics as practiced in institutions permits of more interference with less evil results than in private practice. In a measure this is true, yet

we are all able to bear testimony to the astonishingly good results amongst the lowly. Even in the hovel, where not a single thing is sterile, except, perhaps, a pot of boiling water on the kitchen stove, we have seen our cases recover rapidly and satisfactorily. If in maternity hospitals instrumentation is a rational procedure, then why is it not even more so in the homes of our patients? If we look upon accouchment as a surgical measure and conduct it accordingly, I believe that results will be better than if treated otherwise. The practice of conducting parturition under the bed clothes, to my mind, is reprehensible. It may be esthetic, but it is not surgical nor even sanitary.

Let me draw a picture or two. Mrs. A. and Mrs. B. are both about to be confined. Mrs. A. has engaged the services of a physician who looks upon parturition from a medical standpoint; who considers his responsibility at an end when the cord is severed and the parents congratulated. During labour he urges voluntary effort on the part of the patient, contriving appliances whereby she may lay out her strength upon the footboard of the bed, or possibly he may volunteer to be the other contestant in the tug of war going on. In vain does she beg of him to help her and in vain does he assure her that he is doing all that he can. If everybody's strength holds out baby is finally born. With slight variations this is the common conduct of normal labour. On the other hand Mrs. B. is to be attended by a physician who assures her that straining and struggling serve only to tire her out and that it is unnecessary. Her prayers for help are not unheard. An anesthetic is given, she is placed crosswise of the bed, the hips well to the edge of the mattress, and the feet placed upon the knees of the accoucheur or supported on either side by assistants. The external parts are cleansed, the instruments which have been boiled and brought to hand are cooled in a solution of lysol, the physician draws on a pair of rubber gloves, the forceps are slipped over the head of the fetus and the labour concluded completely under control. Progress may be closely watched, the parts kept clean, the perineum more easily protected, repaired if lacerated, the placenta delivered, and the toilet made with a minimum of contamination. Furthermore, much time may be saved and the patient's strength husbanded.

If I were asked to select from my armamentarium the instrument with which I would most unwillingly part, I assure you, fellow practitioners, there would be no faltering decision. Directly I should go to my case and grasp those dual blades, and nothing but a losing fight could wrest them from me.—*St. Paul's Medical Journal.*

HINTS ON TREATMENT OF SCIATICA.

Stevens' "Manual of Practice of Medicine" gives the following terse and valuable hints on the treatment of sciatica:—"In the acute stage rest is essential. Hot fomentations or linear blisters may be applied along the course of the nerve. Deep injections of morphine, antipyrin or cocaine may be required to relieve the pain. In rheumatic cases, full doses of the salicylate of sodium are useful. In chronic cases, prolonged rest is desirable. Counter irritation should be made by frequent small blisters, by the actual cautery, or by acupuncture. Deep injections along the course of the nerve give much relief, and one of the following remedies may be employed: Morphine and atropine, cocaine, antipyrin or plain water. Electricity sometimes does good. Internally, iodide of potash in small doses is useful; in syphilitic cases it should be given in large doses. The following combination is efficient:

R Tinct. aconite root..... 3 ij
 " belladonna..... 3 ij
 " cimicifuga 3 ij

M. Sig.—Twelve drops every four to eight hours."

TREATMENT OF ACNE.

Dr. Lusk, in a case of acne, characterized by papules, pustules and comedones, and caused by errors of diet, constipation and menstrual disturbance, recommended proper treatment for the general condition and used locally the following lotion :

R Zinc sulphate 3—ij
 Sulphuret of potash..... 3—ij
 Sulphur, precip.....q. s. ad. 3 iv
 Aqua rosae.....q. s. ad.

M. Sig.—The zinc and potash should each be dissolved in half the quantity of water, and the second added to first slowly, with constant stirring. The sulphur should be first made into a paste with the resulting solution, and then thoroughly mixed in mortar.—*Post-Graduate*.

TUBERCULOSIS AND CHILDHOOD—A RESUME.

(By WILLIAM JACOBSON. *Journal of Tuberculosis*, Jan., 1902).

The author calls attention to the early recognition of the disease: "The child is the father of the man, whatever knowledge is disseminated for the good of the child will certainly make a stronger man," "Human cells are the defenders against incoming agents of destruction." Heredity is our inheritance of these cells; if these are powerful, i.e., our heredity is good, we shall conquer these enemies; if

not they will overpower us. Cell activity is marked in childhood; in disease the task to be overcome will be proportionate to the relative heredity strength. Our endeavours should be to fortify this cellular resistance and avoid cellular irritability, and thus prevent or stay the disease.

He speaks of the difficulty of diagnosis because of the absence of bacilli from the sputum, these being swallowed by young children. Also of the dangers of test injections. Calls attention to our early recognition in the diagnosis of the parts involved in tuberculosis, viz., skin, subcutaneous tissues, mucous, serous and synovial membranes, pia mater, glands, bones, lungs, liver, spleen, kidneys, testes. We should be able to differentiate between tuberculosis and other diseases in which they are involved.

Glands are infected first, proved by finding bacilli in them and not in the lungs. Glandular enlargements in children are the forerunners of more serious future troubles. Bearing in mind these facts, diagnosis can be made. Calls special attention to hectic fever, emaciation, ulceration of skin, mucous membranes, swellings of the joints. Lungs, if suspected, may show only a few crackling rales below the nipples and in the scapular region. The lower lobe of the lung in young children may show a cavity, whereas in adults we seek the upper lobe. Enlargements of abdominal glands, diarrhoea, griping after food, are common. Loss of appetite, fretfulness, pyrexia, disturbed sleep, clenched hands, point to tuberculous meningitis. After this the rapid pulse, headache, vomiting and pupillary signs. Then follow the contracted pupils and slow pulse, stupor, hemiplegia and coma.

Tubercular iritis is rare; the diagnosis is made chiefly by its chronicity. Middle ear disease may be due to the bacilli; again, mastoid disease is often due to them. It is wrong not to interfere surgically with them. Cold abscesses are often present in infants. In respect to treatment he emphasizes the necessity of daily bathing with cool water as one of the best stimulants to cell activity. Exercise is enjoined, well ventilated rooms, no overcrowding as in tenements. He calls special attention to building of proper tenements with roof gardens, where children can play at all times of the year. Proper medication, and in very badly diseased children, their isolation in sanatoria is advised. By these means we can combat the disease and tend towards the termination of this dread affection.—*St. Paul Medical Journal.*

DILATATION OF THE HEART IN CHILDREN.

(EUSTACE SMITH, M. D., F. R. C. S. *The Practitioner*, London, January, 1902).

The author is of the opinion that moderate cardiac dilatation in children is not infrequent and that it exists quite apart from any valvular trouble. It may arise from over-exertion at play, rapid growth, nephritis, bronchopneumonia and infectious fevers, being common in acute rheumatism and influenza. The physical signs are said to closely resemble pericardial effusion. The shape of the cardiac dullness is said to be characteristic, reaching upwards far above the third rib and its right border is continued downwards and outwards to the right fifth interspace to join the liver dullness, instead of curving upwards to the infra-sternal notch. Attention is called to the fact that in rheumatic cases the dilatation is accompanied by endocardial murmurs from inflammatory thickening. In moderate dilatation the discomfort is not great, the heart returning to normal as the general nutrition improves. It is in the cases of acute illness when the dilatation is rapid that the condition becomes serious, the dilatation affecting the auricles as well as the ventricles, and is due to degeneration of the heart muscle, the danger being in proportion to the degree of degeneration. The destruction of muscle fibre is said to be greater in diphtheria and influenza than in rheumatism. In any case where there is rapid broadening of the area of dullness, especially if vomiting, coldness of the surface and partial collapse co-exists, the prognosis is regarded as grave. In all cases of acute disease where dilatation is present, the patient should remain constantly in the recumbent position, all starchy foods avoided, also grapes, baked apples, oranges and acid fruits, relying on milk, custards, strong soups, yolk of egg and stale bread or rusks until the stomach is able to take care of boiled fish, chicken, etc. It is recommended that the drug treatment of the original disease be continued. Strychnia pushed to the point of toleration in connection with a suitable preparation of iron and alcohol. For the moderate dilatation occurring in anemic children, nothing is required in addition to means calculated to improve digestion and general nutrition, and to forbid their engaging in those games that require violent exercise.—*St. Paul Medical Journal*.

CREOSOTE AND CREOSOTE.

Merck & Co., in a communication to the American Pharmaceutical Association, call attention to a great danger in-

to which the careless or unwary doctor may fall in prescribing creosote. Only beech wood creosote should be used internally. We reproduce a Merck label in which is contained the caution: "Caution.—Whenever creosote is indicated for internal medication, this kind (wood creosote) should be dispensed; and under no circumstances should so-called 'creosote' from coal-tar be given internal use unless explicitly so directed. Wood creosote and 'coal-tar creosote' are two different substances. They do not consist of the same chemical ingredients; and they differ very largely in their action on the human body. Wood creosote is comparatively harmless; while 'coal-tar creosote' is distinctly poisonous. A substitution of 'coal-tar creosote' for wood creosote may, therefore, cause the gravest consequences."—*Texas Medical Journal*.

HARMLESS ALBUMINURIA.

Wm. Osler (*N. Y. Med. Jour.*) records a number of interesting cases of men past fifty who were found to have albuminuria and an unfavourable prognosis given accordingly, who, nevertheless, survived this discovery for many years. He concludes that at this period of life, albuminuria, or even the presence of a few tube casts in the urine, is not at all infrequent and not always serious. They are, however, always danger signals, and should be warnings to "go slow," especially as regards the quantity of food eaten. The points on which one should lay special stress as indicative of serious disease are:

- 1.—Persistent low specific gravity of the urine, 1.008 to 1.012.

- 2.—The state of the heart and arteries. Marked sclerosis of the peripheral arteries, with the apex beat of the heart an inch or two outside of the nipple line and a ringing, highly accentuated aortic second sound.

- 3.—The presence of albuminuric retinitis.

DIAGNOSIS OF BILIOUS COLIC.

The first symptom of gall-stone colic is usually pain at the pit of the stomach, which in some instances extends round the waist; it may run to the right shoulder, often-times down into the right iliac fossa, sometimes in the back, and sometimes it is more severe just beneath the heart. It may form a girdle or sense of constriction around the waist; cold perspiration breaks out over the patient, owing to the intense pain; a waxy palor comes on, which is follow-

ed by reaction in a few hours, fever running up to 103-4° or 105° F., depending largely upon the idiosyncrasy of the patient. We may find the temperature to reach 105° F. in a bad attack of gall stone colic. Every evidence of approaching death is present. There is often a deep-down boring pain in the epigastrium, a little to the right. If, in addition, we find jaundice coming on within a few hours from the beginning of the attack, we can say that it is due to occlusion of the bile ducts. If we find an enlarged gall bladder there must be something to cause it, and we may infer that the ducts are occluded, and if it be the first, second, or third attack it is most likely to be caused by a stone. We may have distension of the gall bladder with mucus, perhaps some muco pus, not bile, because the bladder is not often distended by bile, it being only the receptacle for the overflow of bile; when it can not get out of the common duct it dams up and fills the bladder.—*Amer. Practitioner and News.*

SEPSIS FOLLOWING LABOUR AND ABORTION.

W. O. Henry gives the following rules: (1) Remove early with the finger, sharp curette and flushing, all debris, decidua, blood clots and sloughing tissue which may be infected from the uterus, and from all raw surfaces in cervix, vagina and vulva; (2) Dry all these raw surfaces, and freely apply to them ninety-five per cent. carbolic acid, washing away the surplus acid with sterile water; (3) Unless hemorrhage requires, leave no tubes or packing of any kind in either vagina or uterus; (4) Have simple carbolized two per cent. vaginal douche used twice a day thereafter; (5) Open the bowels freely with calomel, one-half grain every hour for four hours, then follow with Rochelle salts until sufficient action has occurred; (6) Give three grains sulphate of quinine every four hours, followed by fifteen drops tincture of chloride of iron, in water; (7) Give good nourishment with milk, eggs and stimulants every four hours; (8) Let this be the routine, early treatment, and more radical measures will rarely be indicated; (9) Fixation of uterus, with infiltration in Douglas' cul de sac or ligaments, or pus in tubes or ovaries must be treated by opening and draining through vagina; (10) Multiple abscesses in uterine walls, or infection of walls or pelvic cavity, call for removal of uterus, and all else necessary by the vaginal route. The abdominal route in all acute cases is dangerous, and seldom, if ever, justifiable.—*Annals of Gynecology and Pediatrics.*

ACETOZONE IN THE TREATMENT OF TYPHOID FEVER.

The writer reports twenty-five cases of typhoid fever treated with this new intestinal antiseptic. The duration of the disease was reduced in a large number of them to fourteen days, the time being reckoned from the development of definite symptoms. This series of cases was remarkably free from bowel complications, and where they were present, in those admitted after the disorder had persisted for some time, they quickly disappeared. There were no deaths and but few terminal expressions of the infection.

The treatment pursued in all cases was to thoroughly move the bowels by grain doses of calomel combined with aloin and guaiacol every two hours until the intestinal canal was emptied. The patient was then given from 1500 to 2000 cubic centimeters of a solution of acetozone that had been prepared twenty-four hours before. The diet was restricted to milk, to which was added acetozone. In addition the same substance was atomized and inhaled. In some cases the acetozone was given in capsule, five grains in sugar of milk, three times daily.

The first effect of the acetozone is an increased secretion of the kidneys. This is soon followed by a pronounced decrease of the odour of the stools and a marked diminution of the microorganisms found in the intestinal dejecta. As a result of his observations, the writer concludes that acetozone is an efficient germicide that is innocuous to man and is readily eliminated. In the treatment of typhoid fever it will destroy the source of the infection if brought in contact with it. In typhoid it obviates the intestinal infection and toxemia, preventing the development of complications and lessening the duration of the disease.—E. WASDIN, *Therapeutic Gazette*, vol. XXVI, No. 5, p. 289, May 15, 1902.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital.

THE SIGNIFICANCE PATHOLOGIC AND CLINICAL OF ABDOMINAL PAIN.

A lengthy article is summarized by the statement that under no circumstances should the pain be masked by opiates until after a thorough physical examination. In all cases of abdominal pain, the accompanying physical signs should be carefully considered. When hemorrhage is suspected the abdomen should always be explored. If the patient is in collapse and too weak to undergo exploration, preliminary infusion of salt solution should be made into the veins and under the skin. When the pain is excruciating and the abdomen shows signs of infection, exploration should be made at the earliest possible moment. The site of the initial pain, as described by the patient and friends, should indicate the place for the incision where the other symptoms leave the operator in doubt. The history and signs other than pain must be relied upon for an exact or reasonably positive diagnosis. When some of the unusual abdominal lesions are suspected, exploration should be made. In some cases it may be useless, but if resorted to as a routine procedure in all cases it would save the greatest number of lives. When there is the least doubt, the genuineness of the pain should be tested as thoroughly as possible. The pain of an atypical typhoid, of a pleurisy, of a pneumonia, must be guarded against. When typhoid is prevalent in a community the greatest precaution must be taken lest the surgeon be misled by the pain. One should be on his guard lest he confuse the pain of simple functional disturbances with that of organic disease. When uncertain as to the significance of pain, the doubt should be given the patient and a surgical exploration made. Finally, when no exploration is indicated pain should be controlled by morphine, hypnotics, or, if necessary, by general anesthesia. With few exceptions, chiefly cases of renal and biliary calculi, the pain that demands general anesthesia indicates operation.—*M. H. Richardson in Boston Medical and Surgical Journal.*

THE SURGICAL TREATMENT IN MITRAL STENOSIS.

Sir Lauder Brunton, in a preliminary note (*Lancet*, Feb^y 8, 1902), proposes a very striking innovation in the field of surgery, it being no less than an attempt to relieve mitral stenosis by surgical means. The method has not yet been attempted on a human being, but he has carried out some experiments upon lower animals, which would lead one to think that the method is possible. The clinical history of mitral stenosis, and the mechanical impediment offered to the circulation, afford an inviting field for surgical speculation. These patients, when in hospital and under treatment, make a partial recovery, there is improvement in the circulation, the edema subsides, and they leave the hospital so far improved that it is possible for them to take up their usual occupation. In a few days or weeks they are back again with a recrudescence of all of the symptoms. This is repeated for months and years until an intercurrent pneumonia or involvement of the kidneys puts an end to the chronic ailment.

The experimental work of Brunton has been devoted to solving some questions connected with the technique of such an operation. As to whether the valve should be cut through at right angles, or whether the opening should be enlarged by an incision between the leaflets, is a matter upon which he is undecided, but thinks that the latter method would be preferable. In cats he has used knives made from hat-pins, to divide the valves. He has not decided as to the best form of knife; this depends upon whether the surgeon decides to operate from the auricle or the ventricle. The latter is less likely to bleed. The knife need not be much thicker than a needle. In exposing the heart in a human being, the incision should be made along the left edge of the sternum, outward along the lower borders of the third and fifth ribs, connecting their outer ends by a third incision, dividing the fourth and the fifth ribs. The flap thus made is turned back on the sternum, the external attachments of the ribs being sufficiently flexible to yield to the pressure. The lung is then pushed back and the pericardium freely divided. If the operation is made through the auricle, it would probably be necessary to incise one rib higher.

In his experiments he has been astonished at the ease with which the heart goes on beating in spite of its being handled. He ventures to suggest this operative procedure in view of the excellent results in surgical wounds of the heart.—*Medicine*.

ADRENALINE AS AN ADDITION TO SOLUTIONS FOR LOCAL ANESTHESIA.

The removal of a sebaceous cyst, the opening of an abscess, or similar minor operation, is facilitated by the suppression of hemorrhage. The application of sponges to a bleeding surface causes more or less pain unless the anesthesia is perfect. If adrenalin is added to solutions for local anesthesia there is an immediate blanching of the skin and the operation is quite bloodless. If one drop of 1 to 1000 adrenalin chloride is injected under the skin, a slight burning sensation is felt, but there is no anesthesia. Within one minute an area of skin about two inches in diameter becomes blanched and remains so for from six to twelve hours. With weaker solutions proportionately less effect and of shorter duration is produced. When local anesthetics such as cocaine or eucaine are associated with the adrenalin, there is the same blanching of tissues, but there is no interference with the local anesthetic action of these drugs. It has been the practice of the writer to add adrenalin chloride in a proportion of 1 to 5000, or 1 to 20,000 to solutions of cocaine for local anesthesia. Under such a solution only the larger blood-vessels bleed when they are cut, and there is very little oozing. In none of the cases was secondary hemorrhage noted.—*C. A. Elsberg in American Medicine.*

ABDOMINAL ROUTE FOR APPROACHING RECTAL TUMOURS.

Robert Abbe, New York, says that, first, operative method for cancer in different parts of the rectum must still be elective; there is no one method that applies to all. The perineal route is still the most available for very limited and very low down growths. The Kraske sacral method is available for a moderate number of growths which exhibit slight malignancy as to infiltration, and are not more than a short finger length within the anus. But the abdominal method combined with those just mentioned more nearly meets the present attitude of surgery in seeking as wide and thorough extirpation as possible for malignant growths.

Second, the artificial inguinal anus had best always be made at the time of operation, and need not be done beforehand.

Third, when the section of the rectum is made well up to the sigmoid, the ends of the severed gut should be in-

verted by a stout silk purse-string suture for more perfect cleanliness and handling.

The question of disposing of the upper stump is one that may well appeal for solution. Whether to put it on a severe stretch and attempt to bring it into a perineal or sacral wound, or to make at once a lateral inguinal colostomy, is a question. The writer's argument is for the latter for the following reasons :

1. In the combined method it settles at once all uncertainty and delay by having it brought out of an inguinal cut before the patient leaves the Trendelenburg position, thus leaving the operator free to confine his whole thought to most thorough enucleation of the cancerous rectum.

2. It removes the anal discharges forever from the pelvis, and thus takes away one source of renewed irritation of any remaining cells of disease.

3. If the base of the bladder proves to be involved in the complete operation and a possible leakage occurs, the danger of mixed urinary and fecal contamination are obviated.

The results of newly established artificial ani in perineum or sacrum are such that continence of flatus and feces cannot usually be hoped for, even to as great an extent as in an inguinal colostomy, therefore, inasmuch as a T bandage or napkin will usually have to be worn, the inguinal has no disadvantage.

5. When then the operator begins with the idea of turning the sigmoid colon end up into the groin permanently, he is much freer to dissect the highest part of the rectum and lower sigmoid with the hemorrhoidal vessels, and then clean out all infected lymphatics from the pelvis, *ab initio*.

The operation as a whole is thereby simplified and abbreviated as well as made more thorough.

6. The great majority of cases with return of disease ultimately require artificial anus, and it should be anticipated in all by this preparation.—*Annals of Surgery*.

SOME POINTS CONNECTED WITH THROMBOSIS.

Sir William Bennett cites two cases of thrombosis and makes some interesting remarks on them. The first was that of a woman, aged 49, who was operated on for femoral hernia. There was nothing unusual noticed at the operation, which was performed in the ordinary way. The temperature rose slightly the next day, as commonly happens, but did not subside, although the wound healed perfectly by first intention. Ten days after the operation

the temperature rose rapidly to 103.5 F., and she complained of pain in the left leg. Examination showed that there was thrombosis of the saphena vein, as well as commencing thrombosis in the femoral vein. She now became very seriously ill; the thrombosis extended rapidly upwards, and as it extended into the belly the opposite limb became similarly affected. She remained very ill, had one or two rigours, and looked like a person suffering from septicaemia. About four weeks after the onset of the thrombus in the lower limb she had an attack of pulmonary embolism, and nearly died. A large flowing mass came away from over the sacrum, exposing the bone and leaving a great cavity. She slowly recovered, and eventually left the hospital well.

The second case was also a woman, aged 27, who was admitted for a severe attack of appendicitis with a high temperature, and an operation was immediately performed. She was intensely anaemic at the time of the operation. She did very well afterwards, and a week later it was found quite accidentally that one of her lower limbs was swollen. She complained of no pain, thus differing from the case mentioned first. Extensive thrombosis of the femoral and iliac veins was found, and on the following day a sudden attack of pulmonary embolism occurred, from which she nearly died. Here, then, was a case of thrombosis occurring after an operation in which the patient was doing well and free from any suspicion of sepsis, followed almost immediately by embolism. In the other case the embolism did not occur till very much later, until, in point of fact, the thrombus had commenced to disappear. In the second case the embolism occurred during the process of the growth of the thrombus. These are two very different conditions, and their importance is great. The thrombus in the first case was the result of septic conditions; in the second the clotting was purely passive. The second patient's blood clotted in the veins because she, being weak and intensely anaemic, had been called upon to bear the shock of what was to her a serious operation, which lowered her vitality considerably.

It is well to bear in mind that all patients of the anaemic type are very prone to blood clotting, and that a certain percentage of them, if placed in bed and kept absolutely quiet after an operation or accident, by which their already feeble physique is still further reduced, are very liable to get thrombosis, more especially in the lower extremities, although the clotting may occur in other parts. There are two other varieties of passive thrombosis to which it is worth while to direct attention. The first

is that which is prone to follow any exhausting disease, such, for example, as enteric fever, the thrombosis following upon which is frequently passive, not septic, and the second is that which follows upon great loss of blood. There is a tendency in many subjects—notably those of the anaemic kind on the one hand and those of the robust “gouty” type on the other—to the occurrence in bed, when in a condition of apparent good health, and kept absolutely quiet for a considerable period—such quiet as, for example, may be necessitated by an operation on the knee joint, severe abdominal cases, or any other cases of severity. Thrombosis is not, for an example, very rare in certain types of patients laid up suddenly with fracture, the thrombosis occurring as often as not in a sound limb.

The practical bearing of this matter is the following: In all operations of expediency, such, for example, as the radical cure of hernia, operations on varicose veins, etc., when performed upon patients in sound general health, who up to the time of coming under treatment have been following their ordinary callings or amusements, it is wise, and in many cases necessary, that the patients should be kept in bed for some days prior to the operation, so that the absolute rest entailed by the operation comes less abruptly upon them—a period of modified rest in the flat position intervening between the ordinary habits of life and the total rest which should follow upon the operation. In all cases of thrombosis, whether septic or aseptic (*i.e.*, passive), no matter what the cause may be, there is a certain period in each variety at which embolism is more prone to occur than at any other time. A proper appreciation of this fact is of some importance, since the time at which embolism is prone to occur is that during which absolute rest for the patient should be most rigidly enforced. In the first case (the septic one) embolism did not occur until three or four weeks after the onset of the thrombosis, and no embolus became detached until the thrombus had not only ceased to grow, but had commenced to disappear; the embolism, in fact, occurred at the time of the softening of the thrombus. The importance of this clinical point is as follows: The period of danger from embolism in a *septic* case of thrombosis is at the time of softening, *i.e.*, when the patient is apparently on the verge of convalescence. On the other hand, in the second case, in which the thrombus was *aseptic*, extensive thrombosis occurred very soon after the operation, and on the following day embolism occurred whilst the thrombus was increasing in size—a clinical sequence which illustrates admirably the fact that in aseptic thrombosis the danger

of embolism is greater during the formation of the thrombus, and not at the period of resolution, the exact reverse of the condition holding good in septic thrombosis.

The practical bearings of these facts upon treatment are the following: In septic thrombosis the greatest care should be taken to ensure absolute rest during the period of resolution; in aseptic cases the greatest call for rest is during the period of the formation of the thrombus. In septic cases on no account should patients be allowed to move until the thrombus has entirely disappeared; in aseptic cases, on the other hand, there is no objection to a little movement when the thrombus has ceased to grow, and there is certainly no reason for maintaining complete rest until it has entirely disappeared; in fact, in the latter period some movement is beneficial.

With regard to the treatment of these cases of passive thrombosis rest of course is absolutely necessary during the progress of the disease. Medicinally the best treatment is what is called the alkaline treatment—alkalies with excess of ammonia will do more to hasten the disappearance of these passive clots than anything else. Locally warm applications are comfortable, and perhaps to some extent promote absorption. When the veins are varicose, if the application has some hardening effect on the skin (Lot. Plumbi, for example) so much the better—when the veins themselves are normal, water fomentations effect every purpose. In the late stage of aseptic thrombus, massage, when used with understanding, is of great service; but by those who are without considerable experience it should not be used, as in such hands it may be dangerous.—Sir William Bennett, *Lond. Clin. Jour. Post Grad.*

Jottings.

Aromatic sulphuric acid, in doses of from ten to twenty drops in chamomile tea, taken at bed time, arrest profuse perspiration.

In the delirium of typhoid fever, or in acute delirium from whatever cause, dilute hydrobromic acid in full doses is almost a specific.

When chilly from exposure, breathe very deeply and rapidly and the increase in bodily warmth will be surprising.

Camphor should be dampened with alcohol when it is desired to powder it. Then it can be rubbed into an almost impalpable powder.

When a urinary antiseptic is needed try lithium benzoate. It is eliminated through the kidneys, increases the flow of urine and sedates the urinary tract.

Always be on the lookout for "walking typhoid." If a man comes to you "feeling sick" be sure and take the temperature and inspect tongue and abdomen.

If you would act upon the duodenum, give calomel and podophyllin; if upon the illium or jejunum, give senna or jalap; if upon the descending colon or rectum, use aloes.

Dr. Weil claims that vomiting in pregnancy can be relieved by a twenty per cent. solution of menthol in olive oil, ten drops, taken in sugar whenever the nausea appears.

The use of stramonium is more effective in spasmodic asthma than belladonna, because it produces a greater relaxation of the involuntary bronchial muscles.

In the treatment of purpura hemorrhagica, large doses of the tincture of the chloride of iron, as much as forty drops every two hours, are advised.

In neuralgias about the face or head three minim doses of the tincture of gelsemium every half hour will often act almost miraculously, and leave no ill effects.

The injuction into the rectum of eight or ten drops of tincture aconite will enable you to pass a catheter into the urethra, which before could not be done.

For sciatica collodion, tincture of iodine, liquid ammonia, equal parts. To be applied widely over the parts with a camel's hair brush.

In Europe smoking is growing so rapidly in favour among the fair sex that on some of the Belgian railroads smoking compartments are to be provided exclusively for women.

Cyanosis with a weak and rapid small pulse, low arterial tension, great feebleness of the heart's action, demands digitalis. This is especially true where the lungs are involved in disease.

Always direct that iodide of potassium be taken in milk. Large doses are then well borne.

When the grass is moved use the damp grass for the carpet in the same way as you would employ tea leaves. The grass revives the colors in a wonderful way, and removes all spots and dust.

Boy or Girl—Which Will It Be?—If the expectant mother walks slowly, flat-footed, has sunken eyes, and craves oysters, it will be a boy. If she walks quickly, with elastic gait, has full eyes and craves sweetmeats, it will be a girl.

Ten to twelve parts of water and one part of ammonia will preserve soft rubber any length of time. Keep rubber pipes, etc., in a glass jar filled with the above solution. Use for your ammonia bottle a rubber stopper; it is better than a glass stopper.

Dr. L. D. Bulkley says that for some time past he has prescribed ichthyol by the mouth, 10 to 15 drops, in capsules, three times daily, and finds that this, through its action on the liver and intestines, will cure nearly every case of hemorrhoids. In fact, he looks upon its internal use as a specific.

When lime has got into the eye something must be done at once. Wash the eye thoroughly with a large quantity of warm water—for a little water but adds to the trouble by slaking the lime—and then introduce a solution of sugar and water. This is superior to solutions of vinegar or dilute acids, because sugar forms an insoluble compound with lime.

Dr. Boskowitz, of New York City, asserts that lobelia will cure spasmodic stricture "as if by magic," and in permanent stricture where it is impossible to pass the smallest sound, the difficulty will be easily overcome after a single application of the drug. He drops into the urethra about fifteen drops of fl. ext. lobelia, then closes the meatus, and holds the lobelia in the urethra for a few minutes.

Several sufferers from writers' cramp are reported to have obtained great relief by becoming enthusiastic golfers. This game requires the use of the upper extremities just to the degree adapted to people who have lived a sedentary life. The movements are necessarily co-ordinate, and they are combined with proper exercise of the lower extremities, and a large amount of time is passed in the open air.

THE CANADA MEDICAL RECORD

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Editorial.

WHAT SHALL BE DONE WITH THE PROFESSIONAL MIDWIFE?

An article under the above title from the pen of Dr. Lewi, of New York, and published in "Medicus," issued at Frederick, M.D., has given us food for reflection. According to the figures published by the New York City Board of Health, it would appear that during the year 1891 there was reported 80,735 births. Of this number, 42,253 were reported by physicians and 38,452 by midwives. For the previous year the figures are very much the same. It would appear that the medical profession of that city shows an undivided opinion, that great evils are wrought by reason of the incapacity and negligence of these midwives. Dr. Lewi states that the hospitals and dispensaries of that city are daily witnesses to the criminality which permits ignorant women to act as medical guardians at the birth of the child. The consensus of opinion which holds this ignorance responsible for the many cases of ophthalmia neonatorum, and of ruptured perineums and of lacerated ora uterorum that are met with at the medical charities is unbiased, it is gleaned from the actual experience of the men who lead in these several specialties. The true

cure would be to prevent women to attend midwifery cases who are not possessed of the knowledge essential to practice medicine generally. Such a view is Utopian—especially where our cities are crowded with a cosmopolitan population, and even in the country. It is of the greatest importance that women who intend to act as midwives should be educated to the highest possible degree in their specialty. We should judge from the tenor of the article we refer to that practically there are not any restrictions to the practice of Midwifery. We do not wonder, therefore, that the medical profession of New York is called upon so constantly to treat the results of midwifery neglect. "We know," writes Dr. Lewi, "that the asylums for the blind are being crowded with children rendered sightless, because of the neglect, criminal or otherwise, of these midwives." In Canada, and in this Province of the Dominion, matters are not so bad as they appear to be in New York. We make a fair attempt at making those women who desire to become midwives qualify themselves—and be licensed to practice. We feel, however, that there is much to be done, and which should be done, to educate them to a much higher standard. The necessity for this higher standard being reached would eliminate a class of women, now allowed to enter, whose natural intelligence and education is such that it is impossible to bring them to the required level. The true test of this being reached must be the examination. This should be conducted in a thoroughly strict manner, and, if not passed most satisfactorily, the license ought to be refused. No special pleading should be allowed to have weight—such as "their living depended on it." We have known such to have an effect. Think of the untold misery these women can cause, not only to the unfortunate mother, but to the child just ushered into the world. We fear that this thought has not sufficiently fixed itself on the attention of those who have in the past been placed as guardians at the portals where these women seek admission. We have, however, in many parishes in this Province women who prac-

tice Midwifery, and who have no qualification beyond the fact that they have attended many cases. Scientific education they have none, and they are the *bête noire* of the qualified physician possibly residing within a few doors of her. For a mere pittance they attend a woman in labour who very often afterwards carries with her a condition the result of ignorance, and which makes her life a burden for the rest of her existence. Surely something might be done to remedy this evil. The interference of the Provincial Medical Board in such cases should be pushed to its fullest extent, not only as a protection to its legally qualified member, but in the best interest of the health and comfort of the mothers of our country.

Personals.

Dr. Von Eberts (M.D., 1897), who has been Medical Superintendent of the Montreal General Hospital, has resigned, and his resignation took effect on the 31st August.

Dr. Turner (M.D., McGill, 1891), who has been one of the House Surgeons of the Montreal General Hospital for the past year, has been appointed Medical Superintendent of that institution in succession to Dr. Von Eberts. He took up the duties of his new appointment on the 1st September.

Dr. R. F. Ruttan, who for the past eleven years has been Registrar of the Faculty of Medicine of McGill University, has resigned, and has been appointed Professor of Chemistry, vacant by the resignation of Dr. G. P. Girdwood.

Dr. Girdwood has resigned the Chair of Chemistry in McGill University, and has been appointed Emeritus Professor.

Dr. W. H. Drummond (M.D., Bishop's, 1884), the well-known dialect poet and author of "The Habitant" and "Johnny Courteau" and other poems, received in June last the honorary degree of D.C.L. from Toronto University. Dr. Drummond is Professor of Medical Jurisprudence in the Medical Faculty of Bishop's University.

A statue to Pasteur was unveiled on 3rd August at his birth place, Dole, Jura. The occasion was celebrated with laudatory orations.

OBITUARY.

Dr. Thomas Christie, of Lachute, Que., and Member of the Dominion Parliament for Argenteuil, died on the 5th of August from an attack of pneumonia. Dr. Christie was seventy-eight years of age, and was born in Glasgow, Scotland. He came with his parents to Canada when he was five years of age, and with them settled in the neighbourhood of Lachute. He graduated as Doctor of Medicine in 1848 from McGill University and for fifty-four years practised his profession. Not only was he the ideal Country Doctor—but from a comparatively early period of his life he took an active interest in public questions, and thus gradually stepped into political life. In politics he was a liberal, but he enjoyed in a remarkable degree the friendship of members of both political parties. Such a good man, both in medicine and politics, will be greatly missed.

The medical profession of Montreal were not only grieved but startled on the 7th of August to hear of the death of one of their number, Dr. J. A. S. Brunelle, which took place somewhat suddenly the previous day at Mountain View, N. Y., where he had a summer residence. Although of late not in the best of health, few of his friends were aware of it, and his death came to them with unexpected suddenness. By those who knew him best, he was greatly liked, for he had a sunny smiling nature. Dr. Brunelle was born at St. Hyacinthe in 1882. He graduated from Victoria College—Montreal School of Medicine and Surgery.

Book Reviews.

Grayson's Laryngology.—A Treatise on the Diseases of the Throat, Nose and the associated affections of the Ear. By Charles P. Grayson, M.D., Lecturer on and Instructor in Laryngology, in the Medical Department, University of Pennsylvania. In one octavo volume of 540 pages, with 129 engravings and 5 colored plates. Cloth, \$3.50 net. Lea Brothers & Co., Philadelphia and New York, 1902.

The many treatises frequently issued on this subject make it a very difficult matter for a new author to furnish a late production that would justify its appearance and contain merit sufficient to distinguish it from the many predecessors. Dr. Grayson has sought to make his work more concise in treatment than most authors by

giving under each disease but one plan to pursue, and that one consisting of what he has found to have been most successful in subduing symptoms and shortening the duration of disease throughout his large *clientèle*. To meet exceptional cases, he has added a few modifications to this routine plan.

Although essentially a volume upon Laryngology, the author recognizes the necessity for inclusion of Ear Diseases in the work, and gives a modern and complete synopsis of what is requisite in this section.

Altogether the book is a very presentable one, containing good paper, clear type and plates, and commends itself to both student and practitioner, particularly on the basis mentioned, as a useful contribution in the special field of Throat, Nose and Ear Diseases.

G. T. R.

Diseases of Women.—A Manual of Gynecology designed especially for the use of students and general practitioners, by F. H. Davenport, A.B., M.D., Assistant Professor in Gynecology, Harvard Medical School. Fourth edition, revised and enlarged, with 154 illustrations. Lea Brothers & Co., Philadelphia and New York, 1902.

This is a handy volume of a little over four hundred pages, and appears to be a model of conciseness and clearness. Its main objects are to give the student clearly, but with considerable detail, the methods of examination and the simple form of treatment of the most common disease of the pelvic organs, and in the second place to help the busy general practitioner to understand and treat the gynecological cases which he meets in his everyday practice. Special attention has been paid to the description and explanation of many minor though important points which are ordinarily omitted in text books, but which are nevertheless of great value. The book aims to be practical, and is therefore devoted principally to diagnosis and treatment, to the exclusion of unsettled theories. There are so many good points in the book that we cannot mention all of them, but we are pleased to see that the author prefers a basin of warm water and castile soap for lubricating the finger instead of using oil or grease, because the latter adheres both to the finger and to the dish. Another good point is the advantage of training the left hand for digital examinations so as to keep the stronger right hand for depressing the abdominal wall and holding instruments. The author gives some good advice when he says that a satisfactory examination cannot be made on a soft bed; the patient should always be examined on a table; but the table must be covered with a soft quilt or blanket and covered with a sheet so as to take away from the patient the idea that she is on a table. We cannot emphasize too strongly another advice given by the author, namely—no matter how busy you are, take the time to write a brief

but clear statement of each case when she comes for the first time to your office; give every one a fresh page and number and index it, and you will find such a book of the greatest value, increasing with each year. The reviewer advises a book of at least one thousand pages of foolscap which will last many years. For patients seen for the first time at their houses, take down some bedside notes and transcribe them into the case book the same day. In making pelvic examinations, he says, have the patient remove the corsets and empty the bladder first beforehand, as the nervous condition causes the bladder to fill quickly and thus renders the examination impossible or useless. These are only a few points, but they may suffice to illustrate the exceedingly practical nature of the work.

A. L. S.

The Practical Medical Lines of Year Books, under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago, Post Graduate School, Vol. vii, *Materia Medica and Therapeutics*, *Preventative Medicine*, *Climatology*, *Forensic Medicine*. Edited by George F. Butler, Ph. G., M.D., Henry B. Favill, A.B., M.D., Norman Budge, A.M., M.D., Harold N. Mayer, M.D., June, 1902, Chicago. The Year Book, Publishers, 40 Dearborn Street.

Sharp, terse and concise is the manner in which the various subjects embraced in this small volume are treated. It is up to date in every way.

F. W. C.

The Neuroses of the Genito-Urinary System in the Male, with Sterility and Impotence. By Dr. R. Ultzmann, Professor of Genito-Urinary Diseases in the University of Vienna. Second Edition. Revised, with notes and a supplementary article on Nervous Impotence, by the translator, Gardner W. Allen, M.D., Surgeon in the Genito-Urinary Department of the Boston Dispensary; Instructor in Genito-Urinary Surgery in Tuft's Medical College. Illustrated. Pages, 198. 12mo. Price, extra cloth, \$1.00, net, delivered. Philadelphia: F. A. Davis Company, Publishers, 1914. 6 Cherry Street.

A most worthy little book, on a very interesting and important subject. The paper used has no gloss, and all details are a well-known standard of the F. A. Davis Company. Very little change has been noted in the revised portion, which shows what a master was Professor Ultzmann. The supplementary article on nervous impotence is most interesting, and does credit to the translator, Gardner W. Allen, M.D.

G. F.

PUBLISHERS DEPARTMENT

SANMETTO IN IRRITABLE AND ATONIC CONDITIONS OF THE GENITO-URINARY ORGANS.

I have used Sanmetto quite extensively in my practice for a number of years, and have learned from the universally good results obtained from its use to pin my faith to it in all irritable or atonic conditions of the genito-urinary organs. I find it the true aphrodisiac in both male and female patients. Since I have used Sanmetto prostatitis has lost much of its terrors and cystitis has ceased to be the grave disease it was before its use. I shall continue to prescribe Sanmetto.

F. A. CROMLEY, M.D.

Gallipolis, Ohio.

SANMETTO IN GENITO-URINARY IRRITATIONS AND ATONIC SEXUAL CONDITIONS.

I have used Sanmetto very extensively in my practice for years, and am daily more and more convinced of its intrinsic merit in all genito-urinary irritations and atonic sexual conditions. It is my sheet anchor in urethritis, cystitis, and chronic prostatitis. I shall continue its use in cases where it is indicated, and also enlarge upon the field of its exhibition as circumstances may suggest. Sanmetto is all right.

FLAVIUS J. KNIGHT, M.D.

Charlotte, Mich.

TREATMENT OF PRE-SENILITY.

Ferguson details a case of impotence following a prolonged attack of gonorrhea. It was his third attack, and his virile power was almost lost and he suffered from frequent micturition. He had in addition orchitis on both sides. The case was peculiarly obstinate and many remedies had been used to no purpose. He had already exhausted the resources of several quacks. Sanmetto was prescribed in teaspoonful doses three times a day and improvement and recovery followed.

MEDICAL NEWS.

New York and Philadelphia.

CANADA MEDICAL RECORD

SEPTEMBER, 1902.

Original Communications.

CANADIAN MEDICAL ASSOCIATION.

The Thirty-Fifth Annual Meeting of the Canadian Medical Association was held in the City of Montreal on the 16th, 17th and 18th of September, under the presidency of Dr. Francis J. Shepherd.

As an evidence of the great success which attended this meeting, the fact that more physicians registered on the first day than on any other previous first day speaks volumes.

At the Morning General Session of the first day a resolution of regret at the recent death of Professor Virchow, which was at the same time one of appreciation for the great work of this eminent pathologist, was proposed by Professor Adami; seconded by Dr. Gardner, Montreal, and carried unanimously.

The meeting divided into sections, Dr. McPhedran, Toronto, taking the chair at the Medical Session, while Dr. O. M. Jones, Victoria, B. C., looked after the Surgical Section.

MEDICAL SECTION.

The Forenoon of First Day.

LIVING CASE, SPLENIC ANAEMIA.

Dr. H. A. Lafleur, Montreal, presented patient, a man in middle life. There was a tumour, a movable mass, about midway between the lower ribs on the left side and the crest of the ilium, with pulsation, but not expansile, over the tumour. The first blood count, made in March, showed 75 per cent. haemoglobin, the red corpuscles 5,000,000; the

white 6,400. A blood count was made again on the 15th September, 1902; showed 4,000,000 and 5,800, respectively.

The tumour changed according to degree and distension of the stomach. There was absence of mobility.

Dr. Osler referred to the difficulty and the lack of complete mobility in diagnosing this case and of enlarged spleen being often clinically mistaken for something else. This was just one of these cases in which the diagnosis was more surgical than clinical.

SOME FURTHER RESULTS IN THE TREATMENT OF TUBERCULOSIS.

Dr. J. H. Elliott, of the Gravenhurst Sanatorium, contributed this paper:

At a meeting of this Association in Toronto in 1899, a report was made upon 155 cases of pulmonary tuberculosis under sanatorium treatment. This paper is a further contribution covering some 400 additional cases treated during the past three years. The nomenclature used in the classification of discharged patients is that adopted by Trudeau: "Apparently Cured," "Disease Arrested," "Much Improved," "Stationary" and "Failed."

Five years' experience has shown that almost all of the patients discharged "apparently cured" remain perfectly well; of those with "disease arrested" many have progressed to good health at home by following the rules of life learned at the Sanatorium; renewed activity of the disease, when occurring, having been as a rule due to unfavourable surroundings, or the necessity of again taking up unsuitable work.

Not the least important part of the work of a Sanatorium is its educative influence. Each patient who returns home is a teacher of the value and importance of a hygienic life, to those who wish to retain their health as well as those who are not strong.

Experience is demonstrating the immense amount of influence for good which results from a properly equipped and conducted Sanatorium. It is unfortunate that there are not more of them. It is hoped that the attention of our philanthropists will be drawn to the crying need of such institutions, and that ere long we shall have a number of them in the various provinces of Canada.

Dr. Osler congratulated Dr. Elliott on the promising results which he has obtained. Two important points should be kept well in mind: First, early diagnosis, and, second, getting patient as soon as possible under proper professional control.

Dr. T. D. Walker, St. John, N. B., referred to the control the physician in the Sanatorium had over the patient.

Dr. John Ferguson, Toronto, spoke of the positive advances that have been made along the line of the curability of pulmonary tuberculosis.

Dr. McPhedran, Toronto, emphasized training patients how to care for themselves at home. He believes, too, that it is true that the neighbourhoods of sanatoria are always areas where tuberculosis is always diminishing.

PLEURISY AS ASSOCIATED WITH TUBERCULOSIS.

Dr. John Hunter, Toronto, read this paper. He first referred to the manner in which bacilli reached the visceral and parietal pleural through the sub-pleural, bronchial or tracheal lymphatic glands, and from the cervical mediastinal and peritoneal lymphatics; also from the tonsils. In arriving at a diagnosis of pleurisy, a vigilant search should be made for a possible tuberculosis origin. One should not always consider the outlook gloomy, as, with properly carried out treatment, the progress is much more favourable than in pulmonary tuberculosis. In at least two-thirds of tubercular pleurisy it is a curable affection. The rapidity of the filling of the pleural cavity is especially characteristic of tubercular cases.

Dwelling upon treatment during convalescence, deep breathing should be practiced very assiduously, and inflation with rubber bags is a valuable exercise. Then change to a suitable climate should be insisted on if the progress towards recovery be retarded.

CLINICAL NOTES ON BLOOD PRESSURE IN DISEASED CONDITIONS BY

DR. A. E. ORR, MONTREAL.

A. Gaertner's Tonometer was shown and the manner of its use demonstrated. Four hundred patients at the Royal

Victoria Hospital, Montreal, were experimented on. The normal pressure was found to be 110 to 120. Seventy cases of typhoid fever were recorded in different stages, showing an average blood pressure of 104.5 m.m. It was highest, but still subnormal, in the first week. There was only one death which took place in a man of 35 years, when pressure was 105 on tenth day, 110 on twenty-first day; then three hemorrhages, and on the twenty-fourth day a fatal hemorrhage.

A large proportion of these had cold baths or cold sponging. Nineteen cases of chronic nephritis were recorded. Of this group the highest was 260; average 208.5. Of acute nephritis there were seven cases; only three of these showed high pressure. Of arteriosclerosis, 37 cases were recorded; highest 110, 16 being 150 and over; 4 from 130 to 145; 3 from 110 to 125; 4 subnormal. The highest was in a man of 72; glycosuria, no albumen.

Valvular diseases of heart, 48 cases, including 11 cases of mitral regurgitation. In mitral stenosis, 8 cases were recorded, 6 being normal. Mitral stenosis with mitral regurgitation, 14 cases. Eleven had practically normal tension. Aortic insufficiency, 3 cases. Myocarditis, 4 cases, one man aged 60 having pressure of 80. Hypertrophy and dilatation of heart of unknown causation, 2 cases 120 and 110 respectively. There were 18 cases with acute lobar pneumonia, with an average for the series of 92.7; only one death. Pleurisy, 16 cases. Neurasthenia, 18 cases, thirteen having normal pressure: 3 from 135 to 140; one of 160. In malignant disease, cancer of viscera, there were no high readings. Anaemia 6 cases, all being normal. Addison's disease, both in early stage, both normal. Purpura haemorrhagica, one case, normal. Puerperal septicaemia, one prolonged case, ending in recovery, had extremely low blood count, 930,000; above normal. One gall bladder case with suppuration, a blood pressure of only 50, ten days before death.

One lead poisoning, 3 of jaundice, one of tubercular meningitis, two of diabetes, two of exophthalmic goitre, 8 of acute articular rheumatism, heart not affected; chronic articular rheumatism, 4 cases, all normal; gonorrhoeal rheu-

matism, 8 cases, 6 normal; rheumatoid arthritis, 16 cases, 6 normal; gout, 4 cases.

There was one case of hemiplegia and 14 of tabes dorsalis, 11 normal pressure; cerebral tumor, 8 cases; general paralysis of insane, one case; Friedreich's Ataxia, one with albumenuria, 140; one acute ascending paralysis, 140; 2 cases tie doloureux, one 130 during the attack. There was one case of epidemic influenza and 36 miscellaneous cases.

In discussing this paper, Dr. Osler considered it to be the best contributed article on the subject.

On the technique of recording the venus pulse, Dr. W. S. Morrow, Montreal, gave a practical demonstration on the blackboard and presented a living subject on this topic.

SURGICAL SECTION.

First Day—Morning Session.

AMPUTATION OF THE UPPER EXTREMITY FOR SARCOMA OF THE SHOULDER JOINT—LIVING CASE BY

DR. J. ALEX. HUTCHISON, MONTREAL.

The patient, a young woman, presented by Dr. Hutchison, gave a history of previous injury to the shoulder followed by the development of a growth in the head of the humerus, accompanied by intense pain. An X-ray of the parts revealed the presence of a large growth which invaded the point, and involved the scapula. The patient was in an extremely unsatisfactory condition for operation, and presented evidences of marked cardiac disease. The incision extended from the middle of the clavicle in front down over the pectoral regions to the lower part of the axilla, and behind, passed over the scapula down to meet the anterior incision.

After severing the middle of the clavicle, the great vessels were ligated, the brachial nerves divided high up, the muscles divided and the scapula freed from its attachments. There was little hemorrhage, and the wound healed readily. Microscopic examination of the growth showed it to be a mixed spindle, and round, celled myeloid sarcoma.

A FATAL CASE OF SECONDARY HEMORRHAGE FOUR DAYS
FOLLOWING THE REMOVAL OF ADENOID'S
BY
DR. PERCY G. GOLDSMITH, BELLEVILLE, ONTARIO.

This paper deals with the case of a child operated on by Dr. Goldsmith for obstructive deafness, due to enlarged faucial tonsils. The operation was not unusual, and the condition of the patient, on the second and third day after the operation, was apparently satisfactory; on the fourth day, however, repeated and alarming attacks of hemorrhage set in, resulting fatally in a few hours. There was no history of hemophilia. The patient was under the care of the family physician at the time of death, and as no post-mortem could be obtained, the cause of the hemorrhage remained unknown.

OCCLUSION OF POSTERIOR NARIS
BY
DR. H. D. HAMILTON, MONTREAL.

The patient was a young man aged 17, who complained of constant discharge from right naris, with complete obstruction of the same side. Duration of the condition, about 12 months.

On examination the patient presented a complete bony partition occluding the right choana.

Family and personal history was negative. Treatment: The bony wall was perforated, and the opening further enlarged by graduated bougies.

ON THE USE OF THE SUBCUTANEOUS INJECTIONS OF PARAFFIN
FOR CORRECTING DEFORMITIES OF THE NOSE.
BY
DR. G. GRIMMER, MONTREAL.

Dr. Grimmer spoke briefly of various other deformities which had been corrected in this manner. In the preparation of the paraffin, it is first sterilized by subjecting it to high temperature. It is injected by means of a sterilized syringe. In the case of the nose, the inner canthi, of the eyes should be protected from the spreading of the

paraffin, by firm pressure applied to the sides of the nose by an assistant's fingers. After injection the parts are molded by the operator as required.

After treatment: Collodion is to be applied to the needle puncture, and cold compresses, to control oedema of the nose and eyelids.

Some possible dangers from the treatment are, paraffin embolism, and necrosis of the skin over the parts.

Dr. Grimmer exhibited two patients successfully treated in this manner; also two rabbits which had been subjected to similar injections.

THE TELEPHONIC PROPERTIES OF THE INFLAMED ABDOMEN;
A SIGN NOT HITHERTO DESCRIBED DUE TO PARALYSIS
OF THE BOWEL IN PERITONITIS

BY

DR. GEO. A. PETERS, TORONTO.

In auscultating the abdomen with a view to ascertaining whether there was paralysis of the bowel in cases of appendicitis, typhoid perforations, traumatism, and other conditons which stand in a causative relation to peritonitis, Dr. Peters has observed that where the gurgling sounds due to the passage of gas and liquid in the bowel are absent from paralysis, the heart sounds are invariably very plainly present over the whole abdomen. In intense cases, particularly in children, both inspiratory and expiratory breath sounds may be heard. Dr. Peters' explanation of the phenomena is; unlike the healthy bowel, where the gas is retained in certain well-defined and circumscribed compartments, each constituting a complete retainer in itself, with vital walls possessing a muscular tonicity under nervous control, the paralysed bowel, by reason of its flaccid and atonic condition, permits an entire change in the disposition of the contained gas; the entire distended abdomen becomes practically and accoustically considered, a continuous column of air or gas, of the precise principle of the stethoscope. The effect of this is further heightened by the rigid abdominal wall, which acts as a sounding board. The prognostic significance would seem to indicate an unfavourable termination in those cases where the sign is very well marked in cases of septic origin.

A CASE OF FILARIASIS IN MAN CURED BY OPERATION
BY
DR. A. PRIMROSE, TORONTO.

A man from the West Indies suffering from lymph scrotum presented himself for treatment and gave a history of attacks of fever which suggested the presence of filaria. On examination of the blood one found the embryos present in large numbers. The embryo filariae were found in large numbers at night, but disappeared from the blood during the day. An operation was performed and a large portion of the scrotum removed. The excised tissue was carefully examined by teasing it in salt solution, and a parent worm was discovered and removed alive. This proved to be a female, and it was subsequently fixed and mounted in a suitable manner for microscopic examination. Subsequent to the operation the filaria embryos entirely disappeared from the blood, and the inference was that the parent producing the embryos had been removed by operation.

The parent worm was afterwards carefully studied by Dr. J. H. Elliott, M. D., Toronto (late of the Malaria expedition to Nigeria from Liverpool school of Tropical Medicine), and a report of his investigations with drawings of the worm formed a part of the paper as communicated by Dr. Elliott.

GENERAL SESSION.

First Day—Afternoon.

ADDRESS IN SURGERY —THE CONTRIBUTION OF PATHOLOGY
TO SURGERY

BY
DR. JOHN STEWART, HALIFAX, N. S.

Owing to the unavoidable absence of Dr. Stewart, this paper was read by Dr. J. W. Stirling, Montreal. In this able address, Dr. Stewart, in commencing, compared the struggles of the early surgeons for a scientific knowledge of their craft to the daring exploits of the early navigators of the fifteenth and sixteenth centuries. A parallel not

altogether fanciful might be drawn between those pioneers of ocean travel and the early masters of our craft. They worked on two lines, the long, weary, and often fallacious track of Empiricism, and the ample, but often disconnected road constructed by those whose chief aim was, in the words of him who led the vanguard, to "study and search out the secrets of nature."

The first advance came with the Anatomist, Vesalius, "and Gay Gawned with William Harvey, the Columbus of modern medicine," when he instituted the application of experimental methods to biological questions.

Finally came John Hunter, "The Father of Scientific Surgery", of whom Billroth says: "From the time of Hunter to the present, English surgery has had something of grandeur and style about it."

But a great advance came from the study of plant life, and the researches of Schwann and Schleiden paved the way for the cellular pathology of Virchow, the basis of our present system of pathology. "And", said Dr. Stewart, "a shadow falls upon us gathered here, as we realise that the veteran master, the undisputed leader of pathological thought and progress for over fifty years, has fallen, and we unite in the desire to lay our spray of cypress on the tomb of him whom we all considered the greatest German of our time."

While with all these new acquisitions the pathologist went on his way rejoicing, the surgeon still lingered with anxious mind and heavy heart, for the question of questions to him was still unanswered, the healing of wounds was the enigma of surgery.

By the close of the eighteenth century, many scientific workers were satisfied the solution of this problem lay in the existence of pathogenic microbes, but it was reserved for Schonlein to prove in 1839 that Finea was due to the growth of a fungus. Later came Davaine and Chaveau, with their demonstration of the bacillus of anthrax.

And finally came Lister, "and," said Dr. Stewart, "the dark hemisphere rolled in one grand movement from its age—long penumbra into noonday. Surgery, Modern

Surgery, was born. In the chronology of our craft, time is divided into: Before and After Lister."

Lister, like Hunter, united in himself the pathologist and the surgeon, and, like him, worked on the lines of experimental pathology.

PRESIDENT'S ADDRESS.

On the evening of the first day, in the Arts' Museum, Dr. Francis J. Shepherd, of Montreal, delivered the Annual Presidential Address. After welcoming the members, Dr. Shepherd spoke of the Dominion Registration Bill which has been so ably pushed through, in the face of many obstacles, by Dr. T. G. Roddick, and expressed the hope that no one Province would decline to act in accord with the almost universal desire to see the Bill finally made law. After a brief résumé of medical progress the speaker entered a protest against the freedom with which syphilitics are allowed to mingle with the community at large, often causing the innocent to suffer more than the guilty. "It is time," said Dr. Shepherd, "that the profession took this subject up and educated the public to a better knowledge of sanitary laws." Passing on to the subject of modern laboratory teaching, the president said, after referring to the large sums of money that had been spent on the erection and endowment of laboratories for the encouragement of research work, "One danger of this great multiplication of laboratories is that it induces men to pursue original investigation who have not the true scientific spirit, and who are utterly unfit for such work. They frequently collect and publish a mass of useless and undigested material, and therefrom draw inaccurate conclusions. All this will not redound to the credit of medical science; "but" continued Dr. Shepherd, "I do not wish it to be inferred that I am opposed to the addition of modern laboratories to our medical schools; they are all necessary, but they must not supplant other work, quite as important to a man who wishes to become a practicing physician or surgeon. Again, we must remember that the Millenium will not be brought about by laboratories, nor will all scientific problems be solved by them. There is one laboratory

which is not so much frequented now as when I was a student. I refer to the hospital wards. Students, while perhaps more scientific, I say scientific because nowadays every one who spends much of his time in a laboratory learning the use of all kinds of modern apparatus, including our old friend the microscope, is regarded as having a scientific training—I may say that students, while perhaps more scientific (microscopical and mechanical), have not the intimate personal knowledge of disease which continued observation at the bedside gives them, so that, when started in some out-of-the-way place without their scientific machinery, they are like fish out of water. It may soon be that they will not be able to diagnose a fracture without the X-rays, tuberculosis without getting bacilli in the sputum, and so on without end. Students are not taught to observe so accurately the evident symptoms of disease, and, as I say, are becoming mere mechanics who need an armamentarium, which only a great hospital or university can possess, to make an accurate diagnosis of an ordinary disease; the higher and more intellectual means of drawing conclusions by inductive reasoning are almost neglected. Mind you, I do not wish to disparage laboratory teaching—it is essential—but we can have too much of a good thing, and laboratories nowadays take up too much of the student's time in the latter years of his curriculum. The ordinary student should have a good working knowledge of laboratory methods, and this should be obtained chiefly during his first two years, but the refinements if insisted upon will be required at the expense of some more useful and practical information, for the average student can only hold so much knowledge—it is hopeless to attempt to put a quart measure into a pint pot."

Speaking of specialism, Dr. Shepherd held up the ideal of all-round knowledge. He thought all doctors should acquire a good working knowledge of all specialties, but an excess of time should not be devoted to any one. A year or two of hospital work, followed by some experience in general practice, should be managed by any one who wishes to become a broad-minded specialist. Referring

to modern quackery and the inadequate ideas of many superficially educated practitioners, Dr. Shepherd said: "Many of the doctors who write to papers like 'The Alkaline Clinic,' the 'Medical Short-Cut,' and others of such a character, have a most misty idea of their profession, and apparently are ignorant enough to deceive themselves as well as the public. I fancy they practice all the pathies. One man from Texas asks the editor if he had anything that was a 'dead-shot' cure for eczema; another asks what is the 'most up-to-date scientific caper' for goitre, and so on."

At the close of his most interesting address, Dr. Shepherd paid a high tribute to the late Dr. Wyatt G. Johnston, Dr. Wm. S. Muir, of Truro, and Dr. Brunelle, of the Hotel Dieu, Montreal.

Second Day—Forenoon.

A General Meeting of the Association opened with a discussion on DISEASES OF THE GALL BLADDER AND BILE DUCTS. Dr. Alex. MacPhedran, Toronto, introduced the *Medical Diagnosis* in this discussion. He mentioned the fact that the gall ducts are narrower at their entrance to the bowel than in other parts of their lumen, and as they lie nearly horizontally, the outflow of bile is easily retarded or obstructed. The ducts are much exposed to infection from the intestinal tract. Of the cardinal symptoms in these cases Dr. McPhedran considered jaundice the most common, while pain varies, but is generally intense. The attendant fever is generally due to toxic absorption. The main diseases to be considered in differential diagnosis are: catharrhal and suppurative cholangitis and acute yellow atrophy. Most catharrhal conditions are infective, but the chills and fever may occur without pus formation. The most common germ present is the common colon bacillus. In the gangrenous cases the symptoms are often ill defined. A most characteristic sign of gall stones is the recurrence of the attack.

Dr. A. D. Blackader, of Montreal, in discussing the *Treatment* of gall bladder affections, said he would confine himself principally to the catarrhal forms of the disease.

He considers the condition more commonly due to altered secretion of the bile ducts, the altered mucus causing inspissation of the bile. Infection of bile he thought takes place in two ways, through the bile ducts and through the portal circulation. In the matter of treatment he considers that no drugs stimulate the flow of bile to the same extent as the bile salts. The flow is increased by exercise and deep breathing. Diet should be carefully considered, should be simple, and as far as possible should contain a large amount of fat. Such patients should drink plenty of pure or mineral water. The patient should also have due regard to a proper method of dress; no corsets or constricting clothing should be worn.

Surgical Diagnosis was introduced by Dr. James Bell, of Montreal. He said it was common to find early vague signs of gastro-intestinal indigestion, which were often found to be present for a long time before an acute attack was precipitated. He spoke of the colon and typhoid bacilli as common causes of infective conditions.

The subject of *Surgical Treatment* was introduced by Dr. J. F. W. Ross, of Toronto. In commencing his paper Dr. Ross expressed a certain lack of faith in the so-called medical treatment of gall stones. Speaking of some details of gall stone operations, Dr. Ross advocated drainage through Morrison's pouch. He laid great stress on the free use of gauze packing to prevent leakage into the peritoneal cavity. In gangrene and empyema of the gall bladder he does not advise removal of the gall bladder, but prefers opening, flushing and draining. In many cases of cystic enlargement of the gall bladder, however, he advised entire removal of the viscus. It is well to remember, after removal of the gall bladder, that gall stones may form in the liver and may pass out into the intestines. He considers mucous fistulae, which occasionally follow operation, as the most troublesome, and said the evil should as far as possible be prevented by the use of a small drainage tube. He also drew attention to the importance of being sure that the drainage tubes did not become blocked.

The discussion of the surgical treatment was led by Dr. G. E. Armstrong, Montreal, who recognizes and re-

commends the employment of medicinal treatment first in gall stones, etc. He does not advise removal of the gall bladder for stone in the cystic duct. He recommends lavage of the stomach before operating on all gall bladder cases, and, as it is difficult to know what the surgeon may encounter on opening the abdomen, he advises the administration of calcium chloride before and after operation to prevent possible haemorrhage.

Dr. Dudley Allan, of Cleveland, Ohio, next spoke "*On the Importance of Early Operation on the Gall Bladder.*" He considers, in view of the fact that an accurate diagnosis is often impossible, an exploratory incision at least should generally be made early, when, he claims, it is often found that many obscure cases are quite amenable to surgical treatment, and, in fact, would fail to recover if we were to temporize. He recited a number of cases where the diagnosis was uncertain, where he had made an exploratory incision, and had often been gratified with the results.

The subject was further discussed by Sir William Hingston, of Montreal, and Dr. Alex. H. Ferguson, of Chicago.

ON FOREIGN BODIES IN THE VERMIFORM APPENDIX

BY

DR. JAMES BELL, OF MONTREAL.

In this paper the writer expresses his opinion that appendicitis never depends on the presence of foreign bodies in the lumen of the appendix. There is little doubt, however, that when foreign bodies gain entrance accidentally into the appendix, they aggravate an otherwise septic infection. Among the foreign bodies which he has found in the appendix are, in two cases pins, in two cases seeds, in one case wood fibre, in one case gall stones and in another case a fish bone.

Dr. Bell's paper was further discussed by Mr. Irving Cameron, of Toronto.

MEDICAL SECTION.

Second Day—Afternoon.

KERNIG'S SIGN—THE FREQUENCY OF OCCURRENCE, CAUSATION AND CLINICAL SIGNIFICANCE

BY

DR. T. D. RUDOLF, TORONTO.

This paper contained the results of an investigation carried out in the different hospitals of Toronto. A large number of patients of all ages were examined, suffering from diverse troubles, and the angles at the hip and knee accurately measured in over 200 of them. In 162 Kernig's sign was present in 97, that is, in over 60 per cent. It was always absent in perfectly healthy children. Dr. Rudolf considers that a more convenient plan is to extend the knee and then flex the hip as far as possible. Sometimes there is more than the usual degree of stretching of the ham strings possible, and this extra flexion can, by the writer's method, be exactly measured when Kernig's sign could not show it. Out of the 97 cases in which Kernig's sign was present, in 59 an angle of less than 165° at the knee could only be obtained, and of these in 10 cases the angle was 135° or less, showing a very marked degree of the sign. These 59 cases were of all kinds, and only one of them was meningitis. Dr. Rudolf then went on to state that none of the theories of explanation of Kernig's sign were satisfactory as to its occurrence in meningitis.

MULTIPLE SARCOMA—REPORT OF A CASE

BY

DRS. F. N. G. STARR AND J. J. MACKENZIE, OF TORONTO.

Dr. MacKenzie read the notes on the case. No autopsy could be made. The patient was a female 38 years of age, a seamstress. The personal or family history had no bearing on the case. For a number of years before 1901, the patient had a goitre, which, under treatment, almost disappeared in the winter of 1901. In April of this year a lump about the size of a pea was noticed slightly to the left of the middle line of the abdomen near the symphysis

pubis, hard, but painless and subcutaneous. In May two or three appeared in the middle line, an inch above the umbilicus, then two or three were discovered in the back. In June two others appeared to the right of the middle line of the abdomen. In July several additional lumps were discovered in the right breast, in size from a pea to a bean. Loss of weight occurred. In August the liver was noticed to be enlarging. Commenced taking arsenic in September. In October a large tumour appeared in the left breast, and a small one was also noticed in the left thigh. Patient began to suffer from rheumatic pains. In November and December the tumours appeared in enormous numbers over the chest and back, abdomen, thighs, and arms above elbows, neck and over back, sides and top of head. In January, 1902, chains of tumours, bean-sized, were noticed in the cervical region, submaxillary and suboccipital regions. By March the 8th she had thousands of tumours, most quite hard. Excisions were made and microscopic examination revealed a type of spindle-celled sarcoma, in which the prevailing cell was very long. As regards treatment, the patient took arsenic with no influence on the condition. Thyroid extract produced slight diminution in the size of the tumours. The patient died. Without autopsy one cannot say where the primary seat of the disease was, although from the great involvement of the liver, that might be the source of the disease.

ON SOME POINTS IN CEREBRAL LOCALIZATION.
ILLUSTRATED BY A SERIES OF MORBID SPECIMENS AND SOME
LIVING CASES.

At an early morning session held at the Royal Victoria Hospital, Dr. James Stewart conducted this clinic.

ON THE ASYLUM, THE HOSPITAL FOR THE INSANE, AND THE
STUDY OF PSYCHIATRY.

Dr. Stuart Paton, Baltimore, Md., advocated hospitals or wards in insane asylums, for proper treatment of acute cases. He also pointed out the benefits to be derived from having medical men to form a consulting staff to an asylum.

ANAESTHETIC LEPROSY.

Two very interesting patients, father and son, were presented by Dr. C. N. Valin, Montreal, according to whom they proved to a certainty the contagiousness of this disease. From the way they had progressed under treatment, Dr. Valin considered the cases hopeful.

SURGICAL SECTION.

*Second Day—Afternoon.*REPORT OF THREE CASES OF CONGENITAL DISLOCATION
OF THE HIP
BY

DR. A. E. GARROW, MONTREAL.

The etiology of this condition is not well established, but heredity seems to play a part. Dr. Garrow speaks of two methods of reduction, (a) bloodless method, (b) through an incision. The chief obstacle to reduction is generally due to fibrous stricture of the lower part of the capsule. Dr. Garrow's experience has been mainly by the open method. This paper was further discussed by Dr. Shepherd, of Montreal.

THE OPERATIVE TREATMENT OF GOITRE WITH A REPORT
OF CASES
BY

DR. INGERSOL OLMSTEAD, HAMILTON, ONT.

As the medical treatment of goitre is very unsatisfactory, an operation is recommended in the following conditions:—1st, as soon as a goitre becomes dangerous, that is, when attacks of dyspnoea occur, or inflammatory changes occur, or there is the slightest suspicion of a malignant degeneration. 2nd, all enlarged thyroids having a tendency to grow towards the aperture of the thorax, even if they are moveable. 3rd, goitres that have reached considerable development from the formation of single large colloid nodes. 4th, when with a moderate goitre symptoms like those of Basedow's disease appear, accompanied with an increased development of the goitre. The

operation advised is the one usually performed by Kocher and is done under cocaine anaesthesia. It consists of a transverse symmetrically bowed incision, with its convexity downwards, from the outer surface of one sterno-mastoid muscle to the other, higher or lower according to the position of the goitre. The skin, underlying platysma and fascia of the sterno-hyoid and sterno-thyroid muscles are reflected upwards. The fascia joined the muscles in the median line of the neck is then divided, as well as the outer fibrous capsule of the gland. The half of the gland which is most involved is then shelled out of its capsule, the superior and inferior thyroid arteries tied and the isthmus cut with goitre clamp and ligated. The remaining attachments are then ligated and portion removed. The wound is closed with a subcuticular wire suture without drainage.

Twelve cases operated on during the past year were reported. The average stay in the hospital was seven days. The resulting scar was very slight, and little or no pain was complained of during the operation.

THE PATHOLOGIC PROSTATE AND ITS REMOVAL THROUGH
THE PERINEUM
BY

DR. ALEX. H. FERGUSON, CHICAGO, ILLS.

In the opening of its paper, Dr. Ferguson said he proposed to discuss more particularly hypertrophy of the prostate. Some of the microscopic changes in the hypertrophied prostate are, 1st, increased weight—may be up to eight or nine ounces,—2nd, greater size; 3rd, any part or the whole of the gland may be involved. Shape varies very much. Microscopically, Dr. Ferguson found all hypertrophied prostates were benign in character. He also found frequent evidences of inflammatory changes. The effects produced may be stated as, 1st, the prostatic urethra is contracted and elongated; 2nd, the vesical meatus is often rendered patulous and sometimes obliterated; 3rd, the ejectulatory ducts are also often patulous, allowing regurgitation of the semen into the bladder, and they are also often obstructed. The effects of obstruction

on the kidneys and bladder are too well known to require discussion. *Treatment:* Dr. Ferguson's method of removal is by the perineal route. He uses a prostatic depressor introduced into the urethra, then elevated in such a manner as to press the prostate down in the perineum. The fingers of the left hand are passed into the rectum as a guide, and then he makes one bold incision through the perineum down to the prostatic capsule. Dr. Ferguson exhibited some special instruments devised and used by himself in this operation.

THE SURGICAL TREATMENT OF ENLARGED PROSTATE

BY

DR. G. E. ARMSTRONG, MONTREAL.

Dr. Armstrong exhibited a specially constructed suprapubic vesical speculum, devised by himself, with a lateral opening which allows the prostate alone to come well in view in the speculum. The speculum can be packed around with gauze to protect the parts from possible burning, the offensive lobe or lobes are then cauterized with the thermocautery. Dr. Armstrong reported seven cases successfully operated upon. One point of advantage in this operation lies in the fact that the cauterized surface does not admit of septic absorption. He urges this method in the early stages of prostatic hypertrophy.

The paper by Dr. Ferguson, and also that of Dr. Armstrong, was discussed by Dr. James Bell, Montreal, Sir William Hingston, Montreal, Mr. Irving Cameron, Toronto, and Dr. Elder, Montreal.

At the evening session of the second day the ADDRESS IN MEDICINE was delivered by Dr. William Osler, Baltimore, Maryland.

In opening his splendid address Dr. Osler spoke of the noble ancestry of our profession. The broad foundations of our professional dignity were laid on the Hippocratic oath. The solidarity of the medical confraternity is pre-eminent. Our profession is distinguished from all others by its beneficence—witness: Anaesthesia, Sanitation, *et al.* There is no limit to the science of medicine. The outlook for the profession was never brighter than to-day. Many

of the diseases of our grandfathers are vanishing. Dr. Osler then put forward a strong plea for the unity of the profession. A sense of self-satisfaction is all too common in the medical ranks as in other walks of life. Chauvinism is an enemy to progress. Dr. Osler mentioned four forms of Chauvinism, namely, national provincial, parochial and individual. Nationalism is apt to become a widespread vice; in so far as this concerns the medical profession, however, international medical congresses have done much to dispel this spirit. Dr. Osler strongly advised young men to go abroad for post-graduate study, especially those who aspired to teach. If this were not possible, he strongly recommended the study of foreign medical literature. "It helps a man" said Dr. Osler, "to be a bit of a hero-worshipper." Continuing, he said: "There is a remarkable homogeneity of the profession on this Continent; still, there is no little provincialism among the profession;—witness: the various provincial medical councils in Canada and the various state boards in the United States." He considers it an outrage that a graduate of Ontario cannot practice in Quebec, or a graduate of Québec in Manitoba. It is democracy run riot; it is provincialism. The solution of the problem rests with the general practitioner. Dr. Osler here paid a high tribute to Dr. Roddick for his indefatigable energy in pushing through the Dominion Medical Bill. Passing on to speak of parochial Chauvinism, Dr. Osler considered we are all tainted with it to some extent. A good method of counteracting this is to encourage professorial interchanges. "Chauvinism in the unit, however, is of much more interest and importance. The consultants do the writing and the talking, and take the fees" said Dr. Osler; "the backbone, however, of the medical profession is the general practitioner. But he should preserve his mental independence and keep up with the times in literature and appliances. Diagnosis, not drugging, is our chief weapon of offence" said Dr. Osler; "lack of systematic personal training in the methods of the recognition of disease leads to the misapplication of remedies, to long courses of treatment, when treatment is useless,

and so directly to that lack of confidence in our methods which is apt to place us in the eyes of the public on a level with empirics and quacks. One should not degenerate into a mere dispenser of quack nostrums like the drug clerk, who has a specific for everything from the pip to the 'pox. Beware of the huge manufacturing chemical concerns and of the 'drummer' of the drughouse." Passing on Dr. Osler said that "learning alone is not sufficient; culture is the bichloride to keep him from intellectual deterioration, and lastly charity among the profession. To make the Golden Rule our code of ethics, adopt the motto of St. Ambrose:—"If you cannot speak well of your brother, keep silence." The word of action is stronger than the word of speech.

THE X-RAY AS A THERAPEUTIC AGENT

BY

DR. C. R. DICKSON, OF TORONTO.

Dr. Dickson said, the explanation of the rational of the X-Ray is at best as yet but a hypothesis. Fortunately we have a practical proof of its utility as a therapeutic agent in many conditions. Dr. Dickson has used it successfully in the following cases:—Naevus, lupus vulgaris, tubercular joints, scleroderma, subacute articular rheumatism (it relieved pain in many cases), neurasthenia, carcinoma of the stomach (this patient gained weight), and in carcinoma of the rectum, which case is also improving.

Dr. G. P. Girdwood, of Montreal, read a paper on the *X-Rays, Diagnostic and Therapeutic*, and exhibited a number of photographs.

The X-Ray in Cancer was the title of a paper by Dr. A. R. Robinson, of New York. A strong plea is that the X-Ray largely does away with the knife, and leaves little scar. It is probable that all superficial cancers can be removed by the X-Ray if seen early. In a delicate locality, such as the eyelid, the rays should always be used as paste, or the knife will do more harm. When malignant growths have spread deeply, the X-ray may be considered our best treatment.

SURGICAL SECTION.

Third Day—Forenoon.

The first paper was *Remarks on the Sympathetic Ophthalmia*, by Dr. G. Herbert Burnham, Toronto, followed by a paper on the *Ocular Manifestation of Systemic Gonorrhoea*, by Dr. W. Gordon M. Byers, Montreal.

A paper on *Excision of the Caecum* was read by Dr. O. M. Jones, Victoria, B. C. Dr. Jones cited four cases operated on. The first lived two years after. A post-mortem proved that the cancerous growth had not recurred at the point of the original operation. Symptoms in all cases were, griping pains in the abdomen, loss of weight and irregular action of the bowels, together with the presence of a mass in the region of the caecum.

ON THREE CASES OF PERFORATING TYPHOID ULCER
SUCCESSFULLY OPERATED ON.

Dr. F. J. Shepherd, Montreal, reported these cases. First, as to technique: Dr. Shepherd has always made use of the lateral incision and has usually found the perforation near the ileo-caecal valve. By this incision the site of the perforation is more easily found than by the median. He has always closed the incision by turning in the bowel and making use of a continuous Lembert suture, employing fine silk. Other ulcerations in the neighbourhood are treated in the same way. Rubber drainage is employed. There is always suppuration in these cases and usually a hernia as a result. General anaesthesia is always used in these cases. Early and rapid operation, seeing that there are no others likely to perforate, are important points. The first case was a woman of 30 with ambulatory form; the second was a woman of 28 admitted on the 8th day. It is of interest in this case that although perforation had taken place there was no leucocytosis. The third was a male, aet. 30, in the third week, seized with severe pain, and one hour after there was obliteration of liver dulness and marked leucocytosis. All are quite well with the exception of hernias.

Dr. Laphorn Smith, of Montreal, presented a paper on *A Case of Total Extirpation of the Urinary Bladder for Cancer*. General considerations: Evolution of the operation in Europe and America; methods employed; results in 100 reported cases. In the author's case there had been previous removal of fibroid by myomectomy. This was followed by cystitis, which was treated, first by medicine, then by injection and afterwards by drainage by permanent catheter, and then by button-hole operation when the cancer was detected by the finger. Extra-peritoneal removal of bladder and affected part of ureter and pelvic glands. Recovery from operation, but death on the 7th day from exhaustion.

THIRD DAY.

General Morning Session.

Election of Officers: Dr. T. G. Roddick, M. P., Chairman of Nominating Committee, presented the Report of this Committee. London, Ontario, was selected as the next place of meeting.

President: Dr. W. H. Moorhouse, London, Ontario.

Vice-Presidents: Prince Edward Island—James Warburton, Charlottetown; Nova Scotia—John Stewart, Halifax; New Brunswick—W. C. Crockett, Fredericton; Quebec—Dr. Mercier, Montreal; Ontario—W. P. Caven, Toronto; Manitoba—Dr. McConnell, Morden; Northwest Territories—J. D. Lafferty, Calgary; British Columbia—C. J. Fagan, Victoria.

Local Secretaries: Prince Edward Island—C. A. MacPhail, Summerside; Nova Scotia—Dr. Morse, Digby; New Brunswick—J. R. MacIntosh, St. John; Quebec—R. Tait MacKenzie, Montreal; Ontario—Hadley D. Williams, London; Manitoba—J. T. Lamont, Trehern; Northwest Territories—D. Low, Regina; British Columbia—L. H. MacKechnie.

General Secretary: George Elliott, 129 John Street, Toronto, Ontario.

Treasurer: T. B. Small, Ottawa, Ontario.

Executive Council: Drs. Moore, Eccles and Wishart, London, Ontario.

DOMINION HEALTH BUREAU.

Dr. E. P. Lachapelle, Secretary of the Board of Health of the Province of Quebec, moved the following resolution, seconded by Dr. J. M. Jones, Winnipeg, which was carried unanimously:—

“Whereas, public health, with all that is comprised in the term, sanitary science, has acquired great prominence in all civilized countries, and

“Whereas enormously practical results have been secured to the community at large, by the creation of health departments under Governmental supervision and control, and

“Whereas, greater authority and usefulness are given to health regulations and suggestions when they emanate from an acknowledged Government Department;

“Therefore, be it resolved, that in the opinion of the Canadian Medical Association, now in session, the time is opportune for the Dominion Government to earnestly consider the expediency of creating a separate department of public health, under one of the existing ministers, so that regulations, suggestions and correspondence on such health matters as fall within the jurisdiction of the Federal Government, may be issued with the authority of a department of public health.

“That copies of this resolution be sent by the General Secretary to the Governor-General in Council and to the Honourable the Minister of Agriculture.”

Treasurer's Report: Dr. H. B. Small presented his report. 317 members had been in attendance, nearly 100 larger than any other previous meeting. All outstanding indebtedness had been paid and there was in the treasury \$325.00 to the good of the Association.

Votes of thanks were passed to Mr. and Mrs. James Ross, of Montreal, in whose handsome grounds had been tendered a garden party on the afternoon of the first day; to the Local Committee and Transportation Committee, special reference being made to Drs. C. F. Martin and J. Alex. Huchison for their indefatigable efforts for the success of the meeting; to the Treasurer; to the President and the profession generally for their hospitality.

Thus was closed the greatest meeting of the 35 years of the Association, and it is to be hoped that the profession throughout Canada will still further take an active interest in this national organization.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

THE DIAZO-REACTION AS A METHOD OF DIAGNOSIS IN CLINICAL MEDICINE.

The actual value of a clinical test depends upon its applicability to everyday work. Should it prove to be a method which can be easily employed in routine practice, and if it be granted that the results obtained are reliable, then there can be no doubt that the test has come to stay.

Much has been written of late upon the value of the diazo-reaction as a test for enteric fever, but it still seems that opinions are by no means unanimous as to the worth of the test in the diagnosis of this disease; and it has certainly been proved that the reaction occurs in maladies other than enteric fever, of which disease tuberculosis is the most important. Acting on the above principles, I have examined the urine in 125 cases of all kinds and descriptions for the diazo-reaction. The cases have not been selected in any way, but the process has been applied in the outpatient room and the result noted.

On these 125 cases in which the urine was examined, 5 only gave a positive reaction. In 120 instances no result whatever was obtained. Amongst those patients whose urine gave a negative result were instances of diseases of the lung of various kinds—phthisis, heart disease, gastric ulcer, bronchitis, etc.

The 5 cases were classified as follows: One was a case of acute tonsillitis; another of lobular pneumonia; two were cases of enteric fever in an early stage, and one was suffering from acute tuberculosis. The last patient was

thought at first to have enteric fever, and this from a general consideration of history and symptoms. The occurrence of a positive reaction with the color test not unnaturally tended to strongly strengthen this view of nature of the case.

Nevertheless, the event proved that the diagnosis was incorrect. Thus the diazo-reaction broke down just at the very point when it would be of the greatest possible use. The extreme difficulty, even the impossibility, of differentiating typhoid fever from tuberculosis is generally admitted, and it is unfortunate that this test, so promising in many ways, should fail us in making a very important and difficult diagnosis.

Three other cases of enteric fever were carefully tested, but they all gave negative results. These cases were all in a more or less advanced stage of convalescence, which does not, however, render the occurrence of the reaction in any degree unlikely, for many cases are recorded in which the result was positive, months after the attack of enteric fever had been recovered from.

I have also, subsequent to the above observations, made many examinations of the urine of patients suffering from typhoid fever, for the purpose of finding the diazo-reaction. Speaking generally, I have found that at some period of the fever the result was nearly always positive, and this usually at an advanced stage of the malady—that is to say, at the end of the second or early in the third week. Positive results were always most freely obtained when the temperature was high and the symptoms severe; in other words, they were always most obvious in well-marked and anxious cases.

The result of my observations, so far as regards enteric fever, is that *the diazo-reaction is of little or no use in a practical sense*. And this because it does not occur at a stage of the malady at which alone difficulties can really arise—the early stage. Further, the liability of a positive reaction to recur in cases of tuberculosis is a most serious drawback, and one which alone would tend to render the test valueless.

As regards the 125 cases, there was not once a positive reaction in the very numerous instances of gout and anemia, and the same applies to diabetes.

It has been stated that in phthisis the reaction shows itself only in those patients in whom the malady is far advanced, and that, therefore, the fact of its occurrence should be regarded as a danger signal.

My experience of the diazo-reaction in phthisis is not large, but I have had the opportunity of applying the test in very advanced cases of the disease. My results do not in any way agree with those which would mark the diazo-reaction either as of usual occurrence in the later phases of the malady or, when it does occur, as being of any special significance. In ordinary cases of this description the result was negative, and when the reaction was positive there was no reason whatever to suppose that the case offered any special feature of gravity beyond that which is usual at the stage at which the affection has arrived.

It is worthy of note, too, in this connection, that the case referred to above of acute tuberculosis, which was at first thought to be one of enteric fever, although showing a well-marked positive reaction, yet some months later was in no worse condition, the disease not having made rapid progress.

My experience, then, of the *diazo-reaction* is that from a strictly practical point of view it is of *very little value*. When the result is positive in enteric fever the malady is so far advanced that there can be no possibility of error as regards the diagnosis. In the very early stage, when alone there may be some little difficulty in determining the nature of the malady, the test usually gives negative results, and even if this is not the case the positive reaction by no means excludes the possibility of the case being one of tuberculosis.

In my judgment, far too much importance is at the present time attached to laboratory tests in clinical medicine. A reversion to the old-fashioned but sound, though laborious, manner of acquiring a knowledge of the symptoms and physical signs of disease is greatly to be wished, for it is by the cultivation of the senses at the bedside and in the dead-house, and in this way only, that a real and satisfactory knowledge of medicine can be obtained.—*Post-Graduate*.—BY DR. SYERS (*Brit. Med. Journ.* May 24, 1902.)

A SPECIFIC TEST FOR HUMAN BLOOD.

For many years it has been the dream of medico-legal students that some day human blood could be positively identified. It was not hoped that severe temperatures, age or contamination would be overcome; even the absolute identification of the fresh specimen seemed impossible. Now, the wildest hopes are realized; not only may human blood be identified beyond fear of contradiction, but age, tem-

perature, filth, contamination and menstrual detritus, etc., have no effect on the reaction. Many innocent men have been executed, and many guilty criminals have escaped justice because the medical profession were not equal to the task of absolutely identifying human blood.

DaCosta, in *Clinical Hematology*, quite recently issued by B. Blakiston's Son & Co., of Philadelphia, gives full instructions for the performance of the test of Bordet : " The blood serum of an animal subcutaneously injected with the blood of another animal of a different species rapidly develops the property of agglutinating and dissolving the erythrocytes similar to those injected, but has no effect upon blood derived from any other source. The blood of a rabbit thus anti-serumized against human blood is diluted 100-fold with distilled water or normal salt solution, and 0.5 cubic centimeter employed. When the human blood is added at ordinary room temperature a distinct cloudy precipitate is formed, which is increased in turbidity by exposure to a temperature of 37°C. No change occurs on adding the serum to the blood of other animals; twenty-three specimens having been tested, with the single exception of the monkey, and in this instance the reaction was delayed and incomplete, and in no way comparable to the cloudiness produced by the mixture of human blood with its anti-serum. Old, dried, and even putrefied blood, diluted 1 to 100 with normal salt solution, reacts typically, and characteristically positive results have been obtained with human blood mixed with equal volumes of diluted blood of sheep, oxen, horses and dogs. Specimens were frozen 10°C. below zero for two weeks without in any way affecting the reaction. Blood mixed with menstrual urine, or such contaminating fluids as soapy water, responded promptly and typically."

Such a discovery is particularly gratifying, since neither the laity nor the legal profession could ever appreciate why we could not be ready to identify human blood. The complicated spectral test, which was only employed by experts possessing expensive equipments of instruments, is relegated to medical history. This distinguished and authoritative author has declared the test a specific test any physician may preform it, but we wonder if the general practitioner will get vouchers from the court for expert testimony? We rejoice in the advance of science, but we could hope that the labours of noble medical men might be made more remunerative to themselves and the profession.

Let every reader test this reaction and report. It has now the sanction and approval of good authority, but can the country doctor perform the test as we are told he can? We believe firmly in his efficiency, but we want to hear from him after he has tried a few experiments.—*Medical Summary.*

ORAL CLEANLINESS.

Many people, otherwise fastidious, go about with filthy mouths. Those using false teeth are ordinarily the worst offenders, but those whose teeth are good are also common offenders. Every physician knows that a filthy mouth is frequently the cause of foul breath and indigestion. It is regrettable that the "disciple of health" should offend the sick by a foul breath; yet, the breath of many physicians is almost unbearable, especially to ladies. A few physicians use liquor, and many use tobacco, and few cleanse their teeth systematically and regularly. It is "our plain duty" to instill into the mind of the laity the necessity of personally performed oral ablutions after the age of four or five years, but how can we do this with reeking breaths? Every child should be taught to cleanse its mouth after every meal, and before retiring, as soon as able to handle a tooth-brush. Plain soap and water and a good brush are all the essentials, but some of the modern non-poisonous antiseptics are desirable and palatable additions to the oral toilet. A saturated solution of boracic acid is better than none. The physician who tastes beer, wine, whisky or tobacco would do well to disinfect his mouth before visiting patients. The physician who does not scrub his teeth—natural or false—four times daily neglects one of the fundamental principles of hygiene, and is hardly to be styled a "teacher" of the laity on matters of hygiene. As to oral hygiene, those with reasonably good natural teeth may do well to scrub them thoroughly with soap and water, or with salt and water, or with some antiseptic, four times a day. Those having false teeth should scrub the plates and the mouth in like manner, and at such times, and keep the plates in a saturated boracic acid solution every night. Any one doing so may keep natural or false teeth sweet and clean, and free from germs; those who do not, can not. Since it is now known that many infections may be, and are, transmitted by the breath, it is the plain duty of the physician to keep his own mouth clean, and teach his clientèle to do likewise.—*Medical Summary.*

COMPLICATED ANAEMIA.

BY T. J. BIGGS, M. D.

Ruth K——, age 14, American, admitted November 14. Diagnosis: Essential anæmia.

The patient had been sent to me by Dr. B——, who said that, in spite of all treatments employed, his little patient had grown steadily worse, and the parents were well-nigh discouraged. Her condition was associated with menstrual disorders; a year previous she said her disposition seemed to change. She found she was becoming morose and despondent; at times hysterical, and suffering very much from melancholy. Her menstrual order was of the menorrhagic form, her complexion was pallid, waxy, skin puffy without œdema; she was easily fatigued upon the least exertion; the heart was irritable; there was shortness of breath, pulse full, but soft, and at times pulsations in the peripheral veins. There was a disgust for food, imperfect indigestion and occasional attacks of gastralgia. In the right apex there was a suspicious dullness, indicating a possible incipient phthisis. Examination of blood showed a relative decrease in quality and quantity of the hæmoglobin, resulting in the blood being paler than normal. The red corpuscles were lighter in color and showed less tendency to form rouleaux; their character was changed, no being of uniform size, some normal, others small (microcytes), others usually large (macrocytes), others irregularly shaped (poikilocytes). The number of corpuscles to a cubic millimetre was about 2,500,500. The white corpuscles were considerably increased in number. A few granular bodies were present, indicating degeneration of the white corpuscles.

The patient was put to bed, secretions regulated, and a half teaspoonful of bovine was ordered every hour in peptonized milk.

On November 18th the bovine was increased to a tablespoonful every two hours.

November 30th, the bovine was increased to a wine-glassful every two hours, given in peptonized milk, alternating with old port wine. The patient at this time showed some improvement, felt stronger, slept better, digestion seemed excellent, bowels regular, and she slept throughout the night quietly.

December 10th, microscopic examination of the blood showed increased quantity and quality of hæmoglobin, and red blood cells 3,000,000 to the cubic millimetre.

December 18th, the patient had gained seven pounds in weight, color good, puffiness of the skin disappeared, and she was taking daily exercise in the open air without suffering fatigue.

December 24, microscopic examination of the blood showed hæmoglobin almost normal, the red blood cells about 4,500,000 to the cubic millimeter, general condition splendid.

On December 26 patient was discharged, cured.

The complete, thorough and rapid cure in this case was undoubtedly due to the blood treatment, for all through her course of treatment, outside of cathartics and some mild heart stimulant, she took absolutely nothing but bovine. Bovine acts in anæmia in all its forms by first stimulating the blood cells to a healthy proliferation, and, secondly, by properly and thoroughly supplying perfect nutrition, carries them on to a full and healthy maturity. Iron in all its forms, while at first undoubtedly beneficial, can only go half way, for it simply stimulates the proliferation of the blood cells and supplies only partial nutrition, the result being that in the majority of cases where it is employed alone, many of the newly born cells, for lack of proper nutrition, atrophy, or become granular bodies.

A CURE FOR TONSILLITIS.

Dr. J. A. Henning claims to be able to cure every case of tonsillitis which comes to him before the third day. The patient is confined to a room of uniform temperature, given a mild cathartic and kept on a liquid nutritious diet. Externally a volatile liniment is applied over the tonsils and throat, and the following mixture taken internally:

R Tinct. guaiac ammon..... ʒ ss
 “ aconite gtt. xl
 “ phytolacca.....gtt. xx
 “ baptisia..... ʒ ss
 Aquaq. s. ad. ʒ iv

M. Sig.—Give from fifteen to sixty drops, according to the age, every half-hour or hour for six hours, then less often as the patient improves; this course will be continued until the patient is cured.

The medicine must be taken as it is, without any water in it or even afterward; a part of the medicine will remain in the throat and exercise a local influence.—*Chicago Med. Times.*

TO PREVENT PITTING IN SMALLPOX.

Dr. T. C. Gibson, in *American Medicine*, says that the following is the best prescription he has ever tried to prevent pitting in smallpox:

R. Ichthyol..... ʒ ij
 Guaiacol..... ʒ ij
 Glycerin..... ʒ ss

M. Apply locally with a feather three times a day.

The earlier it is commenced, the better the effect. The face should be bathed before each application with lukewarm water and soap.

THE TREATMENT OF EARACHE.

Dr. Geo. L. Richards in a paper read at the last meeting of the American Medical Association, and reported by *Pediatrics*, advocates the use of a glycerole gelatin bougie in the acute earaches of children. Its formula is as follows :

R. Carbolic acid..... ʒ vij
 Fl. ext. opium..... ʒ vj
 Cocaine..... gr. iij
 Atropine sulph..... gr. iij
 Aqua..... ʒ liij
 Gelatin..... gr. xvij
 Glycerin..... gr. clviij

M. This makes 47 bougies. They should be kept in lycopodium or wrapped in tinfoil. Before using, the bougie should be dipped in water, then it will readily slip into the external ear, and dissolving, set free the anodyne.

ADAMKIEWICZ'S SERUM TREATMENT OF CANCER.

Two recent publications (*Berliner Klinische Wochenschrift*, June 16, 1902) call for renewed interest in cancroin, the serum proposed by Adamkiewicz for the treatment of cancer. Prof. Kugel, of Bukarest, gives the minutest details of an apparently hopeless case cured by the use of this agent.

The patient was a woman fifty-three years old, who some years before had a small mass removed from the left breast. During the next six years recurrences near the cicatrix were extirpated three times, and later the entire breast was removed. Microscopic examination made by both Babes and Albert showed the growth to be one of carcinoma. After this evidences of the progress of the diseases were found below the clavicle, in the cartilage of fourth rib, in the right breast ; there was pain and edema of the left upper extremity, and the usual symptoms appearing in the development of a cancer going towards a fatal issue.

As no relief could have been afforded by operation the cancroin was used. In October, 1900, the first injection was made. Almost immediately after this the edema and pain in the upper extremity decreased, and, after a few injections, entirely disappeared. The patient began to increase in weight, and other features of the case either improved or remained stationary. All this was reported in the *Therapeutische Monatshefte*, August, 1901.

During the past year the improvement in the patient has been still more marked, and the cancerous infiltration has gradually disappeared, so that at the present time only a small red spot indicates the position of the affected portion of the rib cartilage, while the enlarged cervical glands are no longer present.

To this case, so graphically described by Kugel, must be added a number which Adamkiewicz himself describes in the same journal. They comprise a considerable variety, cancer of the tongue, of the larynx, esophagus, stomach and breast.

In all of the cases the use of the cancroin was followed by favourable results, without any untoward signs. What makes the matter more interesting is the quick response of the symptoms to the cancroin injections shown, for instance in the decided reduction of swelling in a cancerous tongue, after the second injection. In the cancer of the esophagus one week's treatment was followed by remarkable improvement. The pains decreased, the dyspnea disappeared, the vomited masses lost their fetid character, the diarrhea was replaced by normal evacuations and stenosis of the esophagus was relieved. Two months after treatment the patient was permitted to go home, improved in all symptoms and able to take food per os. She was gaining weight at the rate of a half kilogram a week.

The evidence presented in these reports are exceedingly encouraging, especially in view of the almost complete absence of any disposition of cancer to improve under the administration of any remedy. Unlike in tuberculosis, hope cannot come to the aid of agent and cause an improvement for a time. Cold facts predominate in the treatment of cancer, and, alas, the progress is always in one direction.

The new agent deserves trial, not because it is a new remedy, but because it is announced with evidence of value in cases which, to say the least, cannot be questioned as to

diagnosis, though some other explanation may be ventured of the improvement coincident with its use.—*St. Louis Medical Review*.

DEODORIZATION OF EXCRETA MOSS MANURE.

The first public mention of the usefulness of moss litter as a deodorizer and absorbent seems to have been made by Dr. Ludwig Happe, in Braunschweig, in December, 1880, since which time its application for the purpose has gradually increased until now, when the system has been introduced into several towns in Germany, and is also practiced in Congleton, Cheshire, England. In Canada this method of deodorizing human refuse had been in use for years at Caledonia Springs. It, of course, at once recalls the dry earth system regarding which great expectations were at one time entertained. The advantages of moss litter over dry earth for the purposes in question are, however, very decided. They consist in the perfect inoffensiveness of the moss litter product, in the fact that one part of moss litter will deodorize and dry at least six parts of mixed excreta, and in the greater agricultural values of the resulting manure. Dry earth (which is required in quantity at least equal to that of the excreta), is valueless from an agricultural point of view; but this is not the case with moss litter, which, as its analyses show, often contains as much nitrogen as ordinary barn-yard manure. Numerous analyses have been made of moss litter manure as produced in Germany, and its average contents from seven different towns may here be stated:

	Per cent.	Lbs. per ton.		Value per ton.
Nitrogen.....	0.664	13.28	at 13c.	\$1.72
Phosphoric acid,	0.350	7.00	5	0.35
Potash.....	0.285	5.70	5¼	0.30
Water.....	83.00			\$2.37

Numerous trials have been made on various crops with this manure, and very satisfactory results are always reported. In all cases it is stated to excel barn-yard manure even when the latter is used in much greater quantity.

Canada possesses in its bogs and swamps inexhaustible quantities of moss litter which is frequently found in beds, several feet in thickness, lying above the peat.

The manufacture of moss litter has been attempted at Musquash, in New Brunswick, and also in Welland County, Ontario. From the latter locality the writer was supplied

with several bales of the moss litter for experimental purposes, and Dr. Laberge, M. O. H. Montreal, undertook to superintend the carrying out of an experiment to determine its deodorizing and absorbent qualities. He reported that 100 pounds of moss litter were sufficient for drying 800 pounds of ordinary excreta from privy pits in Montreal, and rendering it entirely inoffensive. A sample of the product remained for days in the writer's office without attracting notice, and indeed it was quite devoid of odour. Its analysis gave the following results:—

	Per cent.	Lbs. per ton.		Value per ton.
Nitrogen.....	1.31	26.2	at 13c.	\$3.41
Phosphoric acid.....	0.90	18.0	at 5	0.90
Potash.....	0.14	2.8	at 5¼	1.15
Water.....	63.47			\$4.46

The valuation of ordinary fresh barn-yard manure with 75 per cent. of water is about \$2 per ton; with 67 per cent water, as in the case of the average given above by Dr. Goessmann, the value is nearly \$2.15. Therefore, much better results might be expected agriculturally from a "moss manure" of the composition just described.

These facts are reported in order to show that Canada possesses in her waste lands abundance of material which might be used in our towns and villages for the production of a very valuable manure, with the simultaneous introduction of very many sanitary advantages. It is not to be expected that cities or towns which are advantageously situated for the water carriage system, or which have already adopted it, will make any changes, but there are many towns and villages in the Dominion where the application of the moss litter system would be very suitable, and the authorities of which, by selling the product or giving it gratis to the farmers of the neighbourhood, might confer a great agricultural advantage. —*Bulletin Laboratory Inland Revenue, Canada.*

THE PROPHYLACTIC USE OF DIPHTHERIA ANTITOXIN.

Dr. Sevestre, the well-known French authority upon diphtheria, has recently reviewed the subject of the prophylaxis of diphtheria by preventive injections of antidiphtheria serum. After giving many details, he states that preventive injections of antitoxin produce immunity in children exposed to diphtheria. Serious accidents have never followed the use of well prepared serum, though an eruption or some joint pains may result. But this immunity only lasts three or four

weeks at most. Should diphtheria develop after the injections, it is very mild in character. Preventive injections are especially indicated in a family, school or hospital in which a case of diphtheria has appeared. They are often of value in a ward containing patients with measles or scarlet fever. Large doses, often repeated, are needed in measles. It should not be forgotten that, even though these injections be given, disinfection and isolation are, nevertheless, necessary. The prophylactic use of serum is recommended by the Pediatric Society and the Academy of Medicine of Paris.—(*Bulletin Medical*, March, 1902.)

EFFICACY OF DIPHTHERIA ANTITOXIN.

The use of Prof. Behring's diphtheria serum has resulted, according to statistics just published, in the lowest death-rate ever recorded from diphtheria in Berlin, in 1901. The deaths from diphtheria were then 469. Prior to the introduction of Prof. Behring's serum, the deaths from this disease ranged from 1,300 to 2,500 a year. In all but one of the Berlin hospitals the serum treatment is in use. In these the mortality is from 12 per cent. to 13 per cent., whereas in the one hospital where it is not used the mortality is 64.7 per cent.—*Vermont Health Bulletin*.

DIAGNOSIS AND TREATMENT OF TUBERCULAR CYSTITIS.

J. B. Bissel, New York—As to the characteristic signs:—The most frequent symptom is hematuria. Often the hemorrhage is very slight and with little or no pain; frequently it is not constant. Usually it comes at the end of urination, varying in amount from a couple of drops to a teaspoonful. It is probably the earliest symptom of the disease—so early at times that it may be called a prodromal symptom. The hematuria which comes on later, after the chronic inflammatory conditions are present, indicating the ulcerating stages of the tubercular deposit, is a different hemorrhage. It lasts longer, comes earlier in the act of urination and the pain which accompanies it is often severe.

Pain is a pretty constant symptom. It comes on early, continues through the course of the disease and at times is so severe as to make one think of calculus or of malignant ulceration. Tenesmus is usually present with the pain. Frequency of urination is a pretty constant symptom, coming on early in some cases.

As the disease progresses, these signs—pain, tenesmus, frequency of urination and hemorrhage—increase. Later pus is always found, either scattered through the urine, as in the early stages—or in shreds, or in the large pieces of ulcerated tissue which appears still later. Large quantities of bladder epithelium are usually found with the pus or before it and point to the bladder as the seat of the disease. Before other symptoms, for several weeks or more, repeated evacuations of clear limpid urine may attract the notice of the patient.

The frequent voidance of clear urine without pain and without apparent cause, with a few drops of bright-red blood at the end of urination, or, less often, preceding it, is almost pathognomic of beginning tubercular cystitis.

The reaction of the urine is acid, although toward the end it may become neutral or even ammoniacal.

At times mucus is present in enormous amounts. As the disease goes on, the urine may become fetid and almost green in colour and contain large fragments of detritus, with blood scattered throughout the urine, instead of coming free at the end of urination as at first. This is, of course, during the period of extensive tubercular deposits and ulceration.

The ulceration may be extensive enough to perforate the bladder-wall and occasionally has sloughed through into the rectum. Incontinence may be present, but is only marked after the tubercular process reaches the neck of the bladder and the latter has been extensively involved.

The cystoscope is of great advantage if used carefully.

By it the ulcers can be made out, usually about the ureteral orifices or in the trigone.—*Phila. Med. Jour.*—*St. Louis Medical Review*.

PROSTATIC GONOCOCCAL AUTO-REINFECTIONS OF THE URETHRA.

T. M. Townsend, New York, presents the following summary of his views on this question:—1. Early and vigorous efforts should be made to prevent gonorrheal prostatitis. 2. Once established, all care should be taken to prevent it from becoming follicular and chronic. 3. Auto-reinfections of the urethra from chronic prostatitis can be differentiated from acute infections. 4. An opinion on the probabilities of future recrudescences should be very guarded. 5. Each prostatic message should be immediately followed by thorough

irrigation of both portions of the urethra, to prevent recurrent acute urethritis. 6. Omission of this irrigation is sometimes permissible for diagnostic purposes. The frequency with which prostatic massage may be done is quite variable. Ordinarily, afrebrile cases of mixed follicular and parenchymatous types bear daily massage well. After six or eight days, the interval between massages may be lengthened one day until five or seven days are reached. Old follicular prostatitis do not seem to tolerate treatment oftener than every third day, increasing the interval with the improvement. In the prostatic treatment, the following ends must be attained:—Evacuation of the infecting focus or foci; effective emptying of other diseased follicles; *restitutio ad integrum* of newly infected areas. The selection of the irrigating fluid depends upon the microscopic findings, silver preparations being preferable when gonococci persist; when gonococci disappear, other bacteria remaining, solutions of corrosive sublimate are indicated; where no bacteria are demonstrable, astringents should be used.—*N. Y. Medical Record*—*St. Louis Medical Review*.

ARROGANCE IN MEDICINE.

The possession of mentality tends to breed arrogance in its owner. The individual is usually unconscious of this, but the effects are equally mischievous. It requires genuine humility, consideration for the rights and needs of others, to keep this arrogance within bounds.

In medical writers and teachers we find this natural tendency makes them ignore the real needs of those who depend upon them for instruction in the everyday cases which engage most of their attention, and the successful handling of which means to them advancement and reputation, in order to discourse exhaustively about some *rara avis*, which a majority of physicians do not see once in a lifetime.

Medical men, who have long since mastered the treatment of minor functional ailments, no longer take an interest in them, and are unwilling to linger over the ABC of practice, but it is precisely here that the medical novice needs special drilling, with all the light that long experience and a masterful mind can shed.

Most of the troubles which bring people to the doctor for help are simple functional troubles—the bad cold, the persistent headache, the acute indigestion, the pelvic pain and dragging, the torpid liver, rheumatism, etc., these are the things they want to be relieved of. And nine times

out of ten, it is the neglect or wrong treatment of these ailments which result in grave organic lesions.

It is very easy to believe that every one knows the fundamentals of his business, particularly if we, ourselves, have acquired the contempt of familiarity, and want to venture into the region of the unknown, to study intricate and complex problems, to speculate, theorize and experiment, leaving those who can follow us to do so if they will, and those who can not to linger by the wayside.

But medical men who elect to become teachers should ever bear in mind that their first duty is to equip those who depend upon them for the knowledge needed in the actual struggle they will have to face as soon as they hang out their own shingles. We should probably have better diagnosticians if medical students were not carefully, if unintentionally, trained to overlook the obvious in a search for some rare and hidden malady.

Let the teacher and the master thoroughly train pupil and subordinate how to deal with simple everyday matters. The mastery of these will lead naturally to the study and comprehension of more difficult problems in the proper time and place.

The teacher who desires to fulfill his obligation to his pupils will not allow himself to feel or show any disdain for the commonplace diseases, but patiently ground his pupils in the *working knowledge* which must constitute the basis of success for each of them.

It requires even finer mental powers to resolve, simplify and elucidate than to tackle hard problems. Moreover, there are few if any diseases about which the final word has been said. Cultivated faculties of observation and discrimination can do their most effective work on familiar ground.—*Medical Brief.*

RULES FOR THE SICK ROOM.

Here are a few rules of the sick room that are worth remembering :—

Never take the temperature in the armpit until you are sure the skin is dry.

Never neglect to chart the temperature as soon as you have taken it.

Never allow a patient to take the temperature himself. Many patients are more knowing than nurses where there is a question of temperature.

Never use anything but a graduated measure for administering doses of medicine, unless ordered to administer the dose in drops.

Never put a hot water bottle next the skin. Its efficiency and the patient's safety are both enhanced by surrounding the bottle with flannel.

Never complain that you cannot get a feeding cup if there is a teapot to be had instead.

Never administer a quantity of food to a patient until you have found out if he can swallow.

Never disregard a patient's intelligent craving for particular articles of diet.

Never use your patient as a thermometer for estimating the temperature of the bath. Although he turns red in hot water and blue in the cold, the record is not exact, and there are other objections of a more or less obvious nature.

Never allow a patient to be wakened out of his first sleep either intentionally or accidentally.

Never imagine that a patient who sleeps during the day will not sleep during the night. The more he sleeps the better he will be able to sleep.

Never hurry or hustle.

Never stand and fidget when a sick person is talking to you. Sit down.

Never sit where your patient cannot see you.

Never require a patient to repeat a message or request. Attend at once.

Never judge the condition of your patient from his appearance during the conversation. See how he looks an hour afterward.

Never read a story to children if you can tell it.

Never read fast to a sick person. The way to make a story seem short is to tell it slowly.

Never play the piano to a sick person if you can play on strings or sing.

Never confine a patient to one room if you can obtain the use of two.

Never allow monotony in anything.—*Nursing Section of the Hospital.*

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital

DIAGNOSIS AND TREATMENT OF TUBERCULAR ARTHRITIS.

J. K. Young (*Therapeutic Gazette*, June, 1902) discusses this important subject. There are certain etiological facts connected with tubercular arthritis in whatever joint which are valuable in arriving at a diagnosis. Eighty per cent. of cases occur before adult life. Males are more frequently affected than females. There is undoubtedly often a hereditary tendency. Some of the signs which stand out prominently are spasm, pain, atrophy and night cries. Too little attention is paid to early fixation of a joint by muscular spasm. Sooner or later it is followed by atrophy of the contracted muscles. The pain which accompanies tubercular arthritis is sometimes referred to the peripheral distribution of the nerves. Thus in spine disease the pain is referred to the anterior portion of the body, and in hip disease to the inner side of the knee. The occurrence of night cries is characteristic of the second stage of tuberculous disease. They are significant of the extension of the disease to other portions of the joint, especially ulceration of the cartilage.

Tubercular arthritis must be differentiated from numerous other diseases of joints. The differential diagnosis between arthritis, say of the knee joint, and of synovitis, the disease with which it is most frequently confounded, brings out the points given above.

NON-TUBERCULAR CHRONIC SYNOVITIS.

1. Marked effusion, capsule thickened.
2. Joint outline enlarged and obliterated.
3. Motion nearly normal.
4. Reflex muscular spasm absent.
5. No atrophy.
6. Pain absent.
7. Limp absent.
8. Night cries absent.
9. Relation of femur and tibia normal.

CHRONIC TUBERCULAR ARTHRITIS.

1. No fluctuation, capsule not thickened.
2. Joint outline clear and distinct.
3. Motion limited.
4. Reflex muscular spasm present.
5. Marked atrophy.
6. Pain acute on motion.
7. Limp present.
8. Night cries present.
9. Tibia subluxated.

Tubercular arthritis should be differentiated from specific arthritis. The symptoms just given of non-tubercular

synovitis, together with the history and the effect of constitutional remedies, will make the diagnosis clear. The same symptoms will make the differential diagnosis between articular rheumatism and tubercular arthritis. X-ray photography furnishes an important means of diagnosis. By it we can distinguish the amount of bone destruction present.

Treatment is constitutional, mechanical and local. The constitutional treatment should be as painstaking as the treatment of tuberculous disease in other parts of the body, and along the same lines. The mechanical treatment may be summed up in one word—traction. By whatever means traction is employed it should be thorough and long continued. The local treatment of tubercular joints by means of iodoform injections is very valuable in the smaller joints, but not so valuable in the knee and hips.

The operative treatment should be thorough when it is done at all; and there are two points which should be insisted on in all operations on tuberculous joints: first the preservation of the bodily heat, and second, rapidity of operation. There are few operations in surgery in which the shock is more profound than in excision of the hip.—*The Memphis Medical Monthly*.

Jottings.

A CURE FOR WARTS.

We have found nothing more generally useful than the repeated application of the end of a bit of wood (*e. g.*, a match) moistened with acid nitrate of mercury, care being taken only to touch the top of the wart, and not to let the fluid run to the sound tissue. The wart gradually shrivels and finally falls off.—*New York Med. and Surg. Journal*.

AN ALLEGED CURE FOR DIABETES.

The London correspondent of the New York "Times" cables to his journal that Dr. A. C. Faulds, of Glasgow, has discovered a remedy for diabetes in an infusion of dried eucalyptus leaves. He uses this in preference to the oil of eucalyptus, and says that his experiments were prompted by learning that the remedy was used by the natives of New Zealand. Of forty-six diabetic patients treated with eucalyptus, Dr. Faulds claims to have cured fifteen, or thirty-three per cent.—*Medical Record*

THE CANADA MEDICAL RECORD

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Editorial.

CANADIAN MEDICAL ASSOCIATION.

The Annual Meeting of this Association, which was held in Montreal, on the 15th, 16th and 17th of September, was by far the most successful in its history. The number of members who registered was much in excess of that of any previous meeting. We, who were present at the inauguration of the Association in 1867, in the city of Quebec, and have attended the majority of meetings since, could not help being struck with the fact that the turning point in its history has at last been reached. Many of those who took an active part in its early history have passed over to the great majority, but not before they had impressed many of their younger brethren with the idea that such an Association must live, and that its growth must keep pace with the growth of confederation. There were times when it seemed almost useless to continue the hard work necessary for its existence, but the work was done, and we believe the present is filled with promises of a bright future. We saw men at this meeting, who have rarely, if ever, been absent; among them Dr. Harrison of Selkirk, Man., and Dr. Sloan, of Blythe, Ontario, and their meeting with fellow workers who have helped to sustain the Association seemed to make them young again. It was a source of regret that Dr. Stewart, of Halifax, was, owing to illness in his family, unable to be present to read his paper, "Surgery." The Address of Dr. Shepherd, the president,

was a masterly production, and made points which we hope will impress many, and lead them to ask whether the ultra scientific courses given at most Medical Schools at present is calculated, as some think, to turn-out good general practitioners. Of the Address in Medicine given by Dr. Osler, of the Johns Hopkins Hospital, Baltimore, we can truly say it impressed every one as being a magnificent oration. No better has ever been read before any Medical Association. We Canadians must ever be proud that not only is Dr. Osler a Canadian, but a Canadian graduate (McGill), and that his early scholastic medical life was passed with his Alma Mater and the early years of his practice in the city of Montreal. The attendance being large, the two Sections, Medical and Surgical, into which the Association divided, were scenes of much life. The papers were, on the whole, good; some unusually so. Perhaps those who took part in the discussions were not as numerous as we might have wished, but those who did take part spoke briefly and to the point. A pleasant feature was the fact that some present spoke in the French language and were applauded on sitting down. This limited discussion is a general fault at all Association Meetings, and its cause is somewhat difficult to fully understand. Some ascribe it to diffidence, others to want of practice in speaking before any assemblage. If this latter is the cause, the remedy lies in the formation of local societies and taking part in the debates.

The social part of the meeting was well looked after. A reception in the Art Gallery, a railroad ride, and visit to the Victoria Jubilee Bridge, thence to Lachine, a sail of an hour on Lake St. Louis on the steamer "Duchess of York," during which a splendid luncheon was served, then descending the Lachine Rapids to the city of Montreal. A garden party, given by Mrs. James Ross, the wife of one of our millionaire citizens, was a feature in the social festivities, and was a thoroughly enjoyable event. On Thursday evening, a Smoking Concert, in the Victoria Rifles Armory, which was largely attended, brought the festivities to a close. A feature of this year's meeting was the special attention paid to the ladies who accompanied the members. A committee of the local doctors' wives and daughters took them in hand. They were entertained to luncheon, and on its conclusion electric

cars were in waiting, which took them around the city and out to the Back River.

In every way then the meeting was a great success, and much credit is due to the committees who had the matter in hand, and who, thanks to the generosity of the Montreal profession, had money and to spare. The next meeting will be in London, Ontario.

THE MEDICAL FACULTY OF BISHOP'S COLLEGE.

The Session of the Medical Faculty of Bishop's College, which opens on the first October, is the first session where the courses will be of nine months' duration; that is, the Primary courses; the Final will continue six months' courses for this and next session. Those only who enter as Freshmen this year come under the nine months' courses. The attendance of students promises to be excellent.

Book Reviews.

A Text-Book of Surgery. By Dr. Hermann Tillmanns, Professor in the University of Leipsic. Translated from the Seventh German Edition by Benjamin P. Pilton, M.D., Instructor in Surgery, Cornell University, and John Rogers, M.D., Instructor in Surgery, Cornell University. Edited by Lewis A. Stimson, M.D., Professor of Surgery, Cornell University. Volume I. The principles of Surgery and Surgical Pathology, with 516 illustrations. New York: D. Appleton & Company, 1901.

This new edition of a well-known and most reliable work on Surgery hardly requires to be more than brought to the notice of our readers, as the book has for a long time been held in high esteem by those most qualified to know; viz., teachers on the subject with which this volume deals. Through an oversight, this book, which is the first volume of the new edition, escaped the reviewer's notice, and we must apologize for the omission, and trust that, like good wine, the subject now dealt with will have improved by the delay of keeping. The volume under description is one of the most complete in every detail, which it has been the reviewer's pleasure to peruse, the text being plain and concise, the print of such a size as not to weary the eye, and, if the remaining volumes keep up to date as they are issued, the complete set will prove a most valuable addition to the library of any medical man desiring to keep abreast of the times in the ever attractive and constantly advancing subject of Surgery.

R. C.

The Practical Medicine Series of Year Books, issued monthly, under the general editorial charge of G. P. Head, M.D., Professor of Laryngology, Chicago; Post-Graduate School, Vol. VIII., Pediatrics and Orthopedic Surgery, edited by W. S. Christopher, M.D., John Ridlon, A.M., M.D., Samuel J. Walker, A.B., M.D., July, 1902. Chicago: The Year Book Publishers, 40 Dearborn street.

The combination of Pediatrics and Orthopedics at first sight might seem a strange combination. It is not so, however, for the bulk of Orthopedic work is done on the young, and really is Surgical Pediatrics. The little volume now before us brings up to date all that is new in these branches.

F. W. C.

Dudley's Gynecology. A Treatise on the Principles and Practice of Gynecology. By E. C. Dudley, A.M., M.D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (3rd) edition. Enlarged and thoroughly revised. In one very handsome octavo volume of 756 pages with 474 engravings, of which 60 are in colours and 22 coloured plates. Cloth, \$5 net. Leather, \$6 net. Half morocco, \$6.50 net. Lea Bros. & Co., Philadelphia and New York, 1902.

This is a work of which both author and publisher may well be proud. Dr. Dudley has furnished a complete and trustworthy exposition of modern gynecology, than which we could not possibly imagine anything more up to date. The second edition was frequently commended as the best treatise on Gynecology extant, but the present edition is, in many ways, superior to it. It contains nearly one hundred more pages of printing and twenty-five new engravings and fourteen plates. There are two points about this work which seem to us to especially recommend it to the student: First, the new and more rational method of arranging the chapters according to their pathological and etiological sequence rather than in the old way of describing all the diseases of a special organ. The student will have a more rational and more comprehensive idea of metritis, for instance, by associating it closely with vulvo-vaginitis, salpingitis, ovaritis and peritonitis than by regarding it as an independent lesion. In connection with this general plan of grouping the subjects on pathological lines, the author has excluded whatever was not based upon pathology or carefully observed experience. The other point which commends the book so much is that a large number of minor manipulations and most of the major and minor operations have been illustrated with new drawings to show the several procedures as they take place step by step. For example, the consecutive steps in hysteromyomectomy are shown in twelve drawings; salpingectomy, in five drawings; vaginal hysterectomy, in fifteen drawings; ovariectomy, in eight drawings; curettage, in five drawings

After carefully looking over these drawings and plates, we can safely say that no work on gynecology has ever been so beautifully illustrated, while the text seems to have forgotten nothing even down to the most minute detail. The author's large experience as a teacher, as a hospital surgeon and as a distinguished Fellow of the American Gynecological Society has qualified him for the duty of writing a valuable treatise, and he has availed himself of his qualifications to the fullest extent. We will take great pleasure in recommending this text-book to our students in gynecology.

A. L. S.

PUBLISHERS DEPARTMENT.

SANMETTO IN CYSTITIS, GONORRHOEA AND IRRITABLE PROSTATE.

I have been an extensive user of Sanmetto for a number of years, and can truthfully say that when the therapy of the pure santal and saw palmetto is indicated, I find Sanmetto a remedy par excellence. I have used it extensively in cystitis, chronic gonorrhœa and irritable prostate, and it has universally relieved, if not cured, my patients. As long as it maintains its present standard of purity I shall use it, for I deem it pure and ethical.

W. R. HILLEGAS, M. D.

Chicago, Ill.

HYPERTROPHIED PROSTATE WITH DIFFICULT MICTURITION.

For an old gentleman, seventy-four years of age, who was suffering from hypertrophied prostate with difficult micturition, I prescribed Sanmetto. The results were favourable, and after taking two bottles of Sanmetto he was so much improved as not to require the use of the catheter, which he had been compelled to use for several months previous, at least once in twenty-four hours. I have since prescribed Sanmetto in five similar cases with equally good results.

E. C. CULBERTSON, M. D.

Keith, Ohio.

SANMETTO IN CYSTITIS, URETHRITIS, PROSTATITIS AND GENERAL INFLAMMATION OF THE GENITO-URINARY TRACT.

I am an earnest friend of Sanmetto. It is a valuable and ethical preparation. From years of experience in its use I have learned to rely upon it in cases of cystitis, urethritis, prostatitis and general inflammation of the genito-urinary tract. In cases where its use is indicated its curative properties are most remarkable. I am satisfied if the profession will carefully discriminate in their cases they will always be well pleased with the results obtained from the exhibition of Sanmetto. I shall continue its use where indicated.

W. E. J. MICHELET, M. D.

Chicago, Ill.

PROTECTED ETHPHARMAL MEDICINES.

I have no use whatever for any form of patented medicine. In the use of crude materials many vexatious things are encountered; if these can be eliminated, much has been accomplished, and an excuse found for the use of protected ethpharmal medicines. So far as my experience goes it is a real advantage to the profession; it enables us to procure in a certain fixed form certain drug effects, and that is what we want. I think pharmacy has reached so high a standard by our best pharmaceutical chemists that the real drug effect is thoroughly brought out. I procured about a month ago an eight ounce vial of Sanmetto. I am perfectly familiar and for years have known the drugs and drug effects of the remedies said to be contained in Sanmetto. The announced composition, freely made known to the profession, has made amends for the name; protected or not as the case may chance to be. I use it for all kinds of irritation of the urinary tract. The sample is exactly what we get in the eight ounce bottle in our drug houses in this place, and I know it, so am willing to order a full size bottle, eight ounces, or any other amount.

L. G. ARMSTRONG, M. D.

Boscobel, Wis.

Electro-Therapeutics, Radiography, Thermo and Hydro-Therapeutics are practically and thoroughly covered in the Journal of "Advanced Therapeutics" (800 pages, issued monthly, \$3 per year.)

The reader is invited to join the "Founders'" Club, and to all who order during 1902 the price is \$2, for the first and *each succeeding* year. It is only requisite that you address following order to "Advanced Therapeutics," 156 Fifth Ave., New York. Send me until countermanded (to December, 1902, ree) the journal commencing Jan., 1903, per year \$2, for which I will pay at he close of the year.

CANADA MEDICAL RECORD

OCTOBER, 1902.

Original Communications.

CASE OF PLACENTA PRAEVIA.

WITH THREATENING URÆMIC CONVULSIONS; RAPID
MANUAL DILATATION OF THE OS UTERI; TURNING
AND DELIVERY; RECOVERY.*

By A. Laphorn Smith, M.D., Fellow of the American Gynecological Society; Professor of Clinical Gynecology, Bishop's College, Montreal and Professor of Gynecology in the University of Vermont, Burlington; Gynecologist to the Western Hospital; Surgeon-in-Chief of the Samaritan Hospital; Gynecologist to the Montreal Dispensary; and Consulting Gynecologist to the Women's Hospital, Montreal.

By permission of Dr. S. F. Wilson, of this city, who called me in consultation, I am allowed to report this case. Mrs. M., the mother of three children, had always been in robust health until her first pregnancy, eight years ago, when she nearly died from puerperal convulsions. She was only saved then, Dr. Wilson informed me, by *accouchement force* at seven months, after having had convulsions every week from the fourth month, in spite of treatment. She became pregnant with her fourth child about the first of November, and every month after that she had considerable hemorrhage without, however, sending for her doctor until about the sixth month, when she had such a severe one that she sent for Dr. Wilson, who at once diagnosed placenta previa and packed and gave ergot to stop the hemorrhage until I could be sent for.

On my arrival the woman was in a very serious condition requiring saline enemata and hypodermics of strychnine. While Dr. Wilson was doing these things and his partner, Dr. Morrison, was administering the anaesthetic, I was preparing my hands, and in a few minutes with one hand on the abdomen and the other in the uterus I had rapidly dilated the cervix and caught a foot and brought it down without rupturing the bag of waters. This was then done and in less time than it takes to tell it the six months foetus was delivered

* Read before the Clinical Society of the Montreal Dispensary, June, 1902.

living, but not viable. The placenta quickly followed and on examining it fully one half of it could be seen to be covered by a dark firm clot corresponding to the surface which had become detached by the first contractions. The hemorrhage, which had been furious until I introduced my hand, seemed to have stopped from that moment, and there was no bleeding after the extraction of the child, the uterus having then been able to contract enough to close the bleeding openings. The child died in half an hour and the mother, after running the gauntlet of the profound anaemia as well as the condition of the kidneys; gradually came back to life. She later developed a temperature and has now a pelvic abscess, probably a pus tube, which Dr. Wilson intends to have me open by the vagina and drain in the meantime, to be followed later, when her strength will bear it, by an abdominal incision. This was my third case of placenta previa and in view of the present tendency to perform so serious an operation as Caesarian section for the relief of the condition, it may be of interest to refer to the other two cases, both of which terminated in recovery of the mother. My first case occurred twenty-three years ago in a woman four months pregnant. This was just before Braxton Hicks had published his method; so I did the best I could with the knowledge we then had at our disposal, which was to put the woman in the knee-chest position and tampon firmly the vagina. The result could not have been more satisfactory; she did not lose a drop of blood after that; and in eight hours I saw the woman safely delivered; first the cylinder of tightly packed cotton, about four inches long, then about two inches of clot, then the placenta, which must have been centrally implanted, for it fitted on the child's head like a Scotch bonnet, and then came the child; all of them coming out in one piece, so to speak. This woman was up and cleaning offices in less than ten days. The next case was a woman near term who was suddenly taken with a terrible hemorrhage. On examination the placenta was found to be centrally implanted. I was very ill at the time and had to hand the case over to Dr. Johnson, who summoned an expert, who immediately anaesthetized the patient and turned and delivered. There was a gush of blood which flew across the room as he introduced his hand, but the moment he drew on the foot the bleeding stopped and did not return. This child was too asphyxiated by the mother's hemorrhage to live, but the mother made a good recovery.

Judging from my knowledge of these three cases, I cannot see how any one could justify himself in performing a Caesarian section, far less in completely removing the tubes and ovaries with the uterus, as has recently been so strongly advocated by several obstetricians of the first rank. The only

possible excuse which they could give is that when Caesarian section is performed before the mother or child have been weakened by hemorrhage, the chances of the child should be much better than by version; but how are we to discover cases of placenta praevia before the hemorrhage begins? Moreover, it is quite probable in my mind that if the child is viable it would have just as good a chance of surviving if delivered by version as when delivered by Caesarian section. While for the majority of cases the child does not count for anything, for the simple reason that it is already dead or that it is not possible for it to live, no matter how it is delivered—while of the total removal of the uterus and appendages it is no excuse to say, as some of these authorities do, that the woman after having the case explained to her was quite willing that she might be rendered unable to have another pregnancy; a woman in that condition is a very bad judge of the advantages of maternity. To the general practitioner who meets with this appalling hemorrhage, I would say “summon expert help immediately, and while waiting for him to come, to control the hemorrhage for a few minutes by means of clean handkerchiefs soaked in vinegar packed in the vagina; but failing to obtain assistance promptly I would advise the rapid but thorough sterilizing of the hands and a partial anaesthetization of the patient by another doctor, or even by a neighbour, with the A. C. E. mixture and then to dilate the os with the fingers formed into a cone, so that they fill the os pretty thoroughly. As soon as the hand can be made to enter the uterus, grasp a foot with the right hand and assist the version by the left hand on the abdomen; there will, as a rule, be no more hemorrhage after the soft plug formed by the child's thigh and buttock covers the bleeding sinuses.” The cause of all the deaths of the mother, and they are not many under this method, and of many of the deaths of the viable child, are not due to the method, but to the delay in employing it, and these conditions are as essential in Caesarian section for its success, both as regards the mother and the child. Even in a primipara with the os closed it is invariably softened by the pregnant condition so that in twenty or thirty minutes at most first one and then two and then three fingers can be bored into the uterus until the constricting muscles are tired out and the whole hand can be passed in. The hemorrhage almost always stops the moment the foot is drawn down.

I would also like to say a few words about the other feature of the first case above reported, namely, the convulsions. I believe that more women have died from the remedies usually employed than from the disease; I mean the prolonged use of chloroform and chloral. By the hypodermic injection of half a grain of morphine followed in ten minutes by the hypo-

dermic injection of twenty-five minims of tincture of veratrum viride, I have in my last three cases at once brought the pulse down from 160 to 50 or 60 and the woman had no convulsion later than ten minutes after. My former assistant, Dr. De Cotret, now director of the largest lying-in hospital in Canada, who introduced the veratrum treatment at my request, tells me that he has had thirty-eight cases of eclampsia without a death of a mother.

245 Bishop St., Montreal.

Selected Articles.

THE STUDY OF THE TREATMENT OF VARIOUS FORMS OF HEART DISEASE.

By G. R. Johnson, M. D., Philadelphia.

Undoubtedly, the most important point in the treatment of heart disease is rest. In the most severe stages this is absolutely necessary, for in this condition syncope is almost certain to follow any attempt at work, or even walking. The use of physiological mechanics is all-important in the treatment of heart cases, for, while much can be done by the use of drugs, yet nothing takes the place of rest. In fact, there are many cases in which drugs appear to be utterly useless, and it is possible to obtain improvement only by the use of long rest, lasting for weeks or months. The reason for this is very evident; anything which reduces the number of beats of the heart naturally reduces its work, and in a diseased organ this becomes a matter of moment. To use a disabled engine as little as possible renders its existence for a longer period possible. So it is with the heart, which is the machine from which life, as we know it, really springs.

Outside of the use of rest, it is well to consider the possibility of reducing the quantity of blood that comes into the heart from the right auricle and must be forced by that organ through the lungs and later driven through the body by the left ventricle. There is an old-time, deep-seated prejudice against the use of venesection, but it is a question whether this prejudice is not unreasoning. It is true possibly that venesection may be required only in urgent cases, but in these when the right ventricle is dammed with venous blood so that its contraction is imperiled and the stoppage

of the heart is threatened, it may be the actual means of preserving life. Under these circumstances it seems to be imperatively demanded, and any old-time prejudice against its use should not be allowed to interfere with the doctor's decision. Depletion can be accomplished, however, by other means, such as by increasing the evacuation of the bowels, the kidneys and the skin. For example, by the use of purgatives, by which the watery secretions of the bowels are increased and by the use of real stimulants, such as the acetate of potash and nitrous ether. Again, by the use of diaphoretics the secretion from the skin can be increased.

When we come to the actual drug treatment of cardiac cases, we find, first, the use of the cardiac tonics, of which the most common is digitalis. This drug is undoubtedly very trustworthy and efficient in properly selected cases. It requires a considerable caution in its use, for, on the one hand, it is necessary not to overdose the patient; and there is also the danger of the accumulative action of digitalis bursting, as it were, with a sudden storm, through the patient's system. While, on the other hand, if not enough of the medicine is given when the symptoms are critical and relief demanded, its administration is worse than useless, for it creates a false confidence. Undoubtedly, the tendency of the profession is to err on the side of giving too small doses of digitalis.

Another drug which has lately sprung into prominence is strophanthus. It is an excellent heart tonic, though perhaps not as trustworthy as digitalis. A very efficient way of giving strophanthus is to give it in the form of the tincture in combination with the tincture of *nux vomica*. If these two drugs are given in equal proportions they produce, as a rule, an excellent effect, not only upon the heart, but upon the nervous system in general. The citrate of caffeine and strychnine are also excellent drugs in their place, the strychnine being indicated rather where a general nervous tonic is required.

To illustrate the use of treatment in a case of cardiac trouble, permit me to quote the following case, which is that of a man, aged 45 years, who had been under observation for ten years. He first came under my care to be treated for acute articular rheumatism, and on each occasion a pre-systolic mitral murmur was heard, while later there developed a tricuspid murmur and the phenomenon of a pulsating liver.

For the past few years he has been obliged to stay in bed from time to time on account of his shortness of breath.

After each attack he resumed his labour, which was severe in character, but in course of a few weeks he would again be forced to return to bed. Recently, after exposure to severe cold, he developed a cough. His legs began to swell. He went to bed and grew rapidly worse. On examination I found that he was suffering from extreme shortness of breath. His face was cyanosed. He had a small rapid pulse, ranging nearly 150 a minute, while his respirations were shallow and rapid. This condition grew rapidly worse, so that I immediately bled him, 10 ozs. being taken from him, and I gave him a hypodermic injection of brandy and 20 drops of digitalis. This was followed by speedy relief, so that within four hours the pulse fell considerably in its rate and his respiration quieted down. He is now in a much better condition, although he still presents, of course, the characteristic appearance of mitral stenosis. His face is congested. He shows the characteristic club finger ends and has a dropsical condition of the feet and ankles. His cardiac impulse is displaced outward and downward, and there is also a marked epigastric impulse. On listening over the cardiac area I find a long presystolic murmur at the apex with a tricuspid systolic murmur over the sternum. Scattered throughout his chest are numerous sibilant rales, while there is absence of breath sounds at the base of both lungs. I gave this man fifteen drops of the tincture of digitalis every four hours, and on the following day his pulse gradually sank lower and lower, and two days later it fell to eighty, when I reduced the dose of digitalis to 10 drops every two hours.

His physical condition also improved so that his ankles were no longer dropsical and the dullness at the base of the lungs was not so noticeable. Under treatment and rest the patient improved until the tricuspid murmur was no longer noticed.

This form of heart disease is one of the most frequent which the general practitioner is called upon to treat. Mitral constriction strains the heart to its utmost, and, while compensation can be maintained moderately well when the patient remains at rest, it becomes a dangerous condition when the patient is forced to work; for the additional strain upon the heart reduces its compensation, backward pressure is exerted upon the lungs and right ventricle, as a result of which tricuspid regurgitation takes place, followed by

dropsy, pulsating liver, venous distention throughout the body and albuminous urine. The action of the heart at the same time is irregular, rapid and feeble in impulse, but fortunately for the patient he is able frequently to recover to a great extent from its serious condition. Undoubtedly, many physicians have patients who have been almost in a dying condition a number of times, from which they have recovered to a comparative degree by careful treatment.

In giving the tincture of digitalis it is well to watch the patient carefully, and, if the disease does not produce material improvement within 24 or 48 hours, it is well to increase it. Many physicians never begin with less than 15 minims every four hours, which makes a dram and a half in the 24. If improvement does not set in, the dose can be increased to 15 minims every three hours, or 20 every four hours continually, but these doses must be watched, for the object is to get a speedy impression upon the heart and then withdraw as much of the drug as is not necessary. The bugaboo of the accumulative effect of digitalis still lingers around this drug. This depended upon the theory that the patient might take harmless doses of the drug for some days or weeks and then suddenly a poisonous effect would be noticed which might end even in sudden death. In the case of digitalis this is due to the fact that it is not eliminated as rapidly as other drugs, so that after a time, the interval not being long enough, the drug is reabsorbed into the system and its toxic effect is noted. However, if the drug is given for a long period in the amount of half a dram of 48 minims a day, this effect as a rule is not noticed, and in this way digitalis may be given for longer periods of time without producing any serious results. The advantage which *strophanthus* is supposed to have over digitalis is that it does not increase arterial tension. Five minims of the tincture of *strophanthus* is equal in dose to 10 or 15 of the tincture of digitalis, for it was found that, weight for weight, *strophanthus* is the more powerful drug, so that its official strength has been reduced from one in ten to one in twenty, while the strength of the tincture of digitalis is one in eight. The other remedies in use in cardiac trouble are similar in action, but are not as strong nor as powerful as these two drugs.

There are many points in regard to the use of cardiac tonics in the various forms of valvular disease. For example: there is a dispute as to the action of digitalis in aortic regurgitation. It has been criticized by some authorities on the theory that in many cases aortic disease is accompanied

by hypertrophy of the left ventricle, and that in consequence digitalis is apt to increase the over-action of this organ. Again, and what seems to be a more vital objection, is that digitalis lengthens the diastolic interval and that regurgitation occurs in this time so that the amount of blood which falls back from the aorta is greater under the influence of the drug. In consequence, there is an increased tendency to cardiac dilatation and a greater probability of syncope resulting from the diminution of the supply of blood sent to the brain. In the experience of many authorities, however, the main objection to digitalis in this form of heart disease seems to be, not that it does any special harm, but that it does very little good. It is in cases of mitral disease in which digitalis seems to be especially happy. It is the rapid, feeble and irregular action of mitral disease which is peculiarly benefited. When aortic trouble is complicated by mitral regurgitation, then digitalis is of advantage.

The best diuretics for use in heart trouble are undoubtedly the acetate of potash and squills. The so-called diuretic mixture, known as the *misturi potassii acetatis composeta*, is peculiarly useful in this condition. It contains 30 grains of the spirit of nitrous ether to the dose, together with 15 minims of the tincture of squills, 20 grains of the acetate of potash and one dram of *succus scoparii*. The digitalis can be given in this mixture, and it makes a peculiarly happy combination in the majority of cases. When the cardiac failure is imminent and a very decided effect upon the heart is desired, the digitalis may be combined with the carbonate of ammonia given in 5 grain doses every 2 or three hours. The unfortunate feature in regard to this treatment is, that it may fail on account of nausea, or on account of the rapid fall of the pulse. It is often well, however, to give the digitalis with water alone, considering only the action upon the heart. Taylor, of Guy's Hospital, has found that the action of digitalis is often improved, especially in cases where it seemed to have no effect, by the addition of the tincture of belladonna. This idea occurred to him in experimentation some years ago, and he has reported a number of cases in which he met with success.

It is less difficult nowadays to recognize such forms of heart trouble as infective endocarditis. As the treatment of ordinary heart disease has grown to be more scientific, there has been still much to learn in regard to the pathology of infective endocarditis, especially as to the role played by micro-organisms. In Bramwell's experiments the introduction of

material from ulcerated aortic valves into the blood current of healthy rabbits did not produce any special result. Orth found that if he passed a fine probe down the carotid artery of a rabbit and injured the aortic valves and then injected into the blood vessels bacteria from pus, that he could produce this condition unless he previously injured the valve. As a result of these experiments we might believe that a diseased condition of the valves is necessary to produce infective endocarditis, and when we come to study these cases we find that there is frequently a history of the previous rheumatic heart affection. In scarlet fever and diphtheria we find that the majority of cases escape contamination even when bacilli are found in the blood, unless there exists an old valvular lesion. Rheumatism may predispose to disease, but it does not itself produce it unless it is associated with micro-organisms. Osler has found, as the result of his study on the subject, that 11 per cent. of his cases of infective endocarditis followed puerperal fever. He explains this by the fact that the already poisoned blood of pregnancy becomes charged with material absorbed from the uterus, and the tendency to thrombosis occurs. It is probable that all septic conditions of the blood are more or less exposed to this shock, and infective endocarditis can follow even slight injuries if the wound becomes unhealthy. There is a peculiar likelihood of this occurring especially in pneumonia at a time when the crisis is expected, or when the inflammatory exudate is clearing away and an absorption is taking place. Then, all of a sudden, there may develop a septic endocarditis. Netter has gone over this subject very thoroughly and has found that in endocarditis following pneumonia the same kind of microbes in the valves as in inflamed lungs, and taking the microbes from the pneumonic lesions and injecting them into the lungs of rabbits whose carotid valves had been experimentally injured, he produced septic endocarditis. There is one great peculiarity in regard to infective endocarditis, and that is the enlargement of the spleen. Acting as a sort of filter, this organ is especially exposed to the poisonous products which may develop in the blood. It has been found in nearly all post-mortems on infective endocarditis that the spleen was enlarged and diseased. It seems as if this organ supplied the proper food for the development of these microbes.

The treatment of infective endocarditis has not been very brilliant. In fact, the disease as a rule is fatal. Here and there cases are reported in which the ravages of the

disease have stopped and the patients have recovered, but, as a rule, a permanent cure is scarcely to be expected. As infective endocarditis is generally the consequence of some form of blood poisoning, the treatment depends considerably on that of septicæmia. Oliver, who has had considerable experience in this class of cases, has found the most satisfactory results from the use of sulpho-carbolate of sodium given in half dram doses three or four times a day. He also administered salol and betanaphthol. Quinine has also been recommended, but its results are doubtful. The ideal treatment, of course, in this class of cases would be the injection of some material possessing bacteriological properties, but, unfortunately, such preparations which are harmless for the blood and tissues have not yet been developed; possibly the present decade will develop them.

The following case is interesting as illustrating a case of infective endocarditis. The man was a mechanic with good family and personal history. While at his work some months before, he struck his chest in the region of his heart, but he never was seriously ill until about six months after he was injured, when he noticed that he could not work properly and he suffered from shortness of breath and pain in the cardiac region and his legs began to swell. This went on until he had reached such a state that he could not lie down in bed. His movements became painful, and a pallid, anxious expression appeared upon his face. His respirations became sallow and rapid, his tongue furred, his digestion wretched, and there appeared also great thirst. But his most troublesome symptoms, he states, were insomnia and shortness of breath. The physical examination exhibited the fact that his apex beat was displaced downward and outward, but there was a greater increase in the deep area of cardiac dullness. A blowing systolic murmur could be heard to the left of the ensiform cartilage and there was also jugular congestion and a pulsating liver. His condition remained about the same for a number of days after coming under my care until one afternoon he had a chill followed by extreme shortness of breath. His pulse became very irregular in a minute and finally he died.

The physical signs pointed to the probability of the disease being due to insufficiency of the tricuspid valves. The fact that the patient had profuse perspirations and intermittent fever pointed to the fact that he was subject to infective endocarditis. As to the relation between the injury to his chest and the infective endocarditis, there is probably no

doubt that the injury produced the heart lesion and that vegetations appeared and the disease later assumed an infective condition.

On examination of his heart after death it was found that there was no special disease in either the left ventricle or the right ventricle, while there was a dilatation of the right auricle, and at the base of the tricuspid valve there was a vegetation which projected into the cavity for nearly an inch. On making cultures from this granulation the presence of staphylococci was demonstrated. Undoubtedly, there were three currents produced in the heart action; (1) a tricuspid direct current; (2) a tricuspid regurgitant current, and (3) a current from the left side of the heart into the right side through a perforation which was found. This cardiac condition undoubtedly explains his symptoms, the insomnia being due to the disturbance of circulation in his brain—*The Medicus*.

THE CAUSE OF DIABETIC COMA.

It may now be accepted that oxybutyric acid is the cause of diabetic coma. Series of laboratory investigations and clinical observations have fairly well determined this point. For several years chemists have been working along this line and have finally reached rather definite conclusions in the matter.

This acid, which is a product of the fermentation of starch, sugar, milk and of various other substances, has been shown to be present in the blood and urine in very large quantities in cases of diabetic coma. Treatment intended to neutralize this acid in the blood has given results which tend to confirm the above-mentioned conclusions. Besides this, coma, similar in all respects to diabetic coma, has been caused in monkeys and in other animals by poisoning them with oxybutyric acid.

From the decomposition of this acid, acetone and diacetic acid arise, so that tests for these latter substances serve to show the presence of oxybutyric acid in any liquid. The chloroform-like odor of acetone is to be noticed in the breath of patients with diabetic coma, and may also be detected in the urine. Indeed acetonæmia was the term proposed only last year for this condition of diabetic toxæmia. But now we learn that beta-oxybutyric acid and not acetone is the true poison.

It is surprising how much of this acid is found in the urine of such cases. It may amount to as much as from

one to four ounces daily. Half an ounce daily is frequently found in cases of diabetes when there is no evidence of coma.

Recently it is suggested that a determination of the amount of ammonia in the urine may be used as affording an estimate of the quantity of oxybutyric acid present, since this acid constantly appears in the urine in combination with ammonia. Testing for excess of ammonia is simpler than testing for the acid. We have seen no precise manner of testing suggested, but it is well known that adding KOH solution and boiling will set free the combined ammonia in any mixture. The escaping gas may be dried, collected and measured in several different ways.

Indeed the steps which led up to this discovery of oxybutyric acid in the urine began with the fact that ammonia was found to be in excess in diabetic urine. Ordinarily in health the combined ammonia secreted by the kidneys in twenty-four hours is 12 to 15 grains or about eight-tenths of a gram. It was first noted that in diabetes the amount of ammonia in the urine was considerably increased. As this ammonia was combined, the necessary inference was that there was an increase in some acid excreted by the kidneys. This was then shown to be an organic acid, and, at the same time, the similarity between acid poisoning in rabbits and the coma of diabetes was pointed out. Upon this evidence was instituted the alkali treatment of diabetic coma. This organic acid was finally shown to be oxybutyric acid; and it was further shown that decomposition of this acid gives rise to acetone and diacetic acid, substances which had already been observed in urine.

Large doses of some alkali, as for instance two or three drams of sod. bicarb., may be given thrice daily to combat the condition of threatening coma. Alkaline solutions, isotonic with the blood, may be used subcutaneously when a fatal issue is impending.

The question of diet has also received a ray of light from these discoveries. The profession has been suspecting that too exclusive a diet does more harm than good in diabetes. Now it has been observed that acetone appeared in the urine of a healthy person when deprived of food for a period of time. The same thing was found to be true in most diseases in which nutrition falls much below par. And recent experiments have shown that when a healthy person is kept for some time upon a diet very poor in carbohydrates, oxybutyric appears in the urine. Add to these observations the clinical fact that some diabetes, when put upon too rigid diet promptly die of coma, and the conclusion follows that a

moderate amount of carbohydrates allowed to diabetics together with sufficient alkali when needed is better than a diet which excludes all starches and sugars.

This discovery has opened up a new field of investigation, and it is probable that it is not yet fully worked over. Already much light has been thrown upon the questions of the causation, the general management and the treatment of diabetes, and we may expect other discoveries of value along the same line to be made by our learned friends and allies, the physiological chemists.—*Medicus*.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

PLEURAL EFFUSION OF ENLARGED LIVER.

To distinguish between a small pleural effusion and an enlarged liver or subdiaphragmatic abscess, Henry Jackson (*Boston Medical and Surgical Journal*) determines by percussion the upper line of dullness on the chest wall and then has the patient breathe in deeply and hold the breath. The upper area of dullness will now be found at a lower level if the liver and not the pleura is involved.—*Denver Medical Times*.

THE DIFFERENTIAL DIAGNOSIS OF SMALLPOX AND CHICKENPOX.

In a letter addressed to a contemporary, Dr. G. S. Perkins calls attention to a simple means of distinguishing chickenpox from smallpox, which deserves to be more widely known. He points out that the vesicles in chickenpox are unilocular, whilst in smallpox they are multilocular. The practical result of this pathological fact is that if a chickenpox vesicle be pricked with a needle, its contents can be completely evacuated and the cell will collapse, whereas in smallpox if one makes twenty pricks with a needle the vesicle will not collapse, because, being multilocular, it is

impossible to empty it. There are, of course, many other points of difference between the two; indeed, smallpox is only likely to be mistaken for the less serious malady when the practitioner is not alive to the possibility of a mistake in the diagnosis. In smallpox, even in its modified form, varioloid, the initial constitutional symptoms are early and well marked, with a considerable rise of temperature and cerebral disturbance. In smallpox the eruption is most abundant on the face and limbs, whereas in chickenpox it is most abundant on the trunk and its distribution is more discrete and general. Moreover, in chickenpox the eruption appears in crops and not, as in smallpox, within a few hours of the first appearance of papules. Then, too, there is the characteristic fall of temperature on the appearance of the vesicles. An absolutely characteristic feature of chickenpox is the appearance on the body of vesicles of different degrees of evolution, some being fully matured while others have just made their appearance. In spite of these usually very distinctive features, cases now and then occur in which even the most experienced may hesitate to formulate a definite opinion. In such cases twenty-four hours' observation will almost invariably clear up the mystery and allow of a correct diagnosis.—*Medical Press and Circular*.

CONCERNING SYPHILIS OF THE LIVER.

Although syphilis of the liver is not an infrequent occurrence, comparatively little has been written on the clinical aspects of the subject. The author gives a short resumé of the history of this affection and some of the literature dealing with it.

He divides syphilis of the liver clinically into three groups:

1. Gummata of the liver.
2. Syphilitic cirrhosis of the liver.
3. Syphilitic affections of the liver (including groups one and two), with icterus.

The latter can be either acute or chronic.

Of the first class the author reports four cases. In all these there was marked enlargement of the liver characterized by nodules of various sizes. Antiluetic treatment brought about complete cures, anatomical and clinical.

Of the third class ten cases are presented with the same satisfactory results following anti-syphilitic treatment.

The symptoms of syphilis of the liver are pain in the

right hypochondrium, sometimes constant, sometimes paroxysmal. If paroxysmal, the attacks may resemble gallstone colics. In nearly every case there are digestive disturbances, such as loss of appetite, eructation, constipation, etc. There is loss of weight, though not usually so rapid or so marked as in cases of malignant growths of this organ. Icterus may be acute or chronic, and in the latter cases are nearly always due to pressure on the common duct. The liver itself is always more or less enlarged; if due to gummata the surface is very uneven; if due to cirrhosis the organ is simply enlarged. Enlargement of the spleen is not constant. Ascites occurs in the later stages.

It is not possible to differentiate between malignant tumours of the liver and gummata by the consistence. If the disease has continued for a year or two without great loss of weight, and if there is any history of lues, the resistance may be attributed to this cause.

An increase of the eosinophyle cell speaks for syphilis. Care must be taken not to confound the diffuse syphilitic enlargement of the liver with the hypertrophic cirrhosis due to alcoholism. In the former, there is usually a history of syphilis and luetic manifestations on the body. The anti-luetic treatment acts promptly.

The chief point in treatment is the free use of the iodides, gradually increased from two to five grammes, for a period of several months.—EINHORN (*Archiv fuer Verdauungskrankheiten*, vol. viii, part 3).—*Interstate Medical Journal*.

THE CLASSIFICATION OF CHRONIC NEPHRITIS.

No serious attempt has ever been made to classify cases of chronic nephritis from the standpoint of etiology. Morbid anatomists and pathologists are far from unanimous in their descriptions of the various types or groups of this disease. And physicians are not always able to make a differentiation that is satisfactory from the clinical point of view, or that holds good in the light of post-mortem revelations. Yet it is important that we have some working classification, even though it be somewhat faulty and largely artificial.

The classification that seems the best is practically that of Senator. It is one that appeals to the clinician as well as to the morbid anatomist. The term "parenchymatous" can be used in place of "diffuse without induration," because, though not literally expressive of the true condition, which is more or less diffuse, it recognizes what is

true, that in this form the parenchymal changes predominate; they are quantitatively greater than in the second variety, where the process, while diffuse, produces chiefly interstitial or stromal changes with resulting induration. The classification would be as follows:

1. Chronic parenchymatous nephritis. (Chronic diffuse nephritis without induration).

2. Chronic interstitial nephritis. (Chronic diffuse nephritis with induration).

(a) Primary chronic interstitial nephritis.

(b) Secondary chronic interstitial nephritis.

(c) Arterio-sclerotic kidney. (Arterio-sclerotic interstitial nephritis).

3. Mixed type—*i. e.*, a combination of 1 and 2.—JAMES B. HERRICK (*Jour. of Am. Med. Ass.*, October 4, 1902).—*Interstate Medical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital

ON THE AVOIDANCE OF SHOCK IN MAJOR AMPUTATIONS BY COCAINIZATION OF LARGE NERVE TRUNKS PRELIMINARY TO THEIR DIVISION.

The diminution of arterial tension is the characteristic feature of shock, and while slight injuries to an extremity cause an increase in said tension, very severe ones cause a decrease of the same. When a certain amount of shock already exists, there is especial danger in the division of sensory nerve trunks. Cocaine injection, by blocking the centripetal influences, effectually keeps down shock from this source. In one case described by the author the pulse jumped from 110 to 150 upon the division of the brachial plexus, no cocaine being used. In a second, where the same thing was done after the drug had been introduced, there was absolutely no shock. When peripheral mixed nerves are put on a stretch there is an acceleration of cardiac rhythm, indicative of a reflex pressor effect. However, this may be followed by lowering of pressure if

the trauma be too extensive. In extensive traumata to extremities the author advises other and early operation (with cocaine as above) to rid the patient of the influences which tend to increase the already existing shock. Arterial tension cannot be judged by the finger on the pulse, but an instrument has been devised for the purpose. There are appended several charts which show the variance of the blood pressure during operations.—CUSHING (*Annals of Surgery*, September, 1902).

CASES IN HAEMATHERAPY FROM SOUND VIEW HOSPITAL.

By T. J. BIGGS, M. D., STAMFORD, CONN.

CASE I. SKIN-GRAFTING WITH CALLUS SHAVINGS IN BLOOD.

Mary M., age 60 years, Irish. Diagnosis, ulcer of leg. Patient admitted to Hospital March 3, 1902. She had a large varicose ulcer situated over the tibia, about $3\frac{1}{2}$ by 2 inches. This condition had existed for nine years, and during that time in spite of all treatment employed had never entirely healed. It had been skin-grafted in the old way, three times unsuccessfully. At the time of entering the hospital the patient suffered so severely from pain that at times she would cry out. She was put to bed, secretions regulated, the ulcer cleaned up by means of a dermal curette, and dressed for the first twenty-four hours with a Thiersch pack. On the morning of March 5, after the surface had been thoroughly cleaned up, a bovine pure pack was applied and kept wet with the bovine for twenty-four hours.

On the morning of the 7th I determined to employ grafts secured from a callus on the small toe, in order to demonstrate the technique of this mode of skin-grafting to five visiting physicians. The mode of procedure was as follows: The callus was thoroughly scrubbed up, and the external layers scraped off. Then thin sections of the layers next to the true skin were obtained by means of a very keen razor. Nine of these were deposited on the ulcerous surface. Over these were laid strips of perforated rubber tissue, then strips of plain bi-sterilized gauze saturated in bovine, and a bandage applied. The nurse was instructed to keep the dressings wet with bovine-pure. This dressing was removed on the 14th, and it was found, much to the delight and astonishment of the visiting physicians, that out of the nine grafts employed eight

were firmly adherent and in a healthy growing condition. The ninth had become displaced and was removed. The wound was now dressed with bovine pure; the dressings being kept wet, and changed once in twenty-four hours. Coincident with the local dressings, from the outset the patient had been given a wineglassful of bovine in milk alternating with wine and beer every three hours. On March 24 she was discharged cured, the entire surface having become covered with new healthy skin.

This experiment has been employed frequently enough by me to demonstrate that where the technique is carefully followed it will in the majority of cases yield the most gratifying results. A point of interest in this case and a usual one, is that from the day of the first dressing of the bovine up to the time the patient was discharged, she was relieved of all pain.

CASE II. SKIN-GRAFTING WITH SKIN-SCRAPINGS IN BLOOD.

Anna H.; age 12 years, American. Diagnosis, burn of right hand. Patient was admitted to hospital March 8, 1902. As a result of the burn she had on the back of her hand an ulcerous surface 2 by $1\frac{3}{4}$ inches, very painful, and in spite of three months' treatment had refused to heal. It was impossible in this case to secure skin-grafts, and as I wished to demonstrate to the visiting physicians who were present the efficacy of *skin-scrapings* as a means of bringing about a rapid healing of small surfaces where grafts could not be obtained, with an ordinary vaccinating comb I secured skin scrapings from the little patient's arms, legs and back. These were deposited within the periphery and dressed as in the other case. The dressing was kept wet with bovine pure until the morning of the 16th, at which time it was removed, and to the delight of the visiting physicians as before, the surface was found to be almost entirely healed, there remaining unhealed only a small space about the size of a ten cent piece, in the center. The wound was now dressed with bovine pure and the nurse ordered to change it every 24 hours. Internally the patient has been getting a teaspoonful of bovine every two hours in peptonized milk. March 24 she was discharged cured.

CASE III. SKIN GRAFTS HEALED IN 6 DAYS WITH BLOOD.

Arnold L., age 24 years, German. Diagnosis, wound of the left cheek, the result of being thrown from a street car. Patient admitted to hospital March 10, 1902. The

wound was filled with gravel and dirt, and involved almost the entire side of the face. A space in the center of the cheek, 2 by $1\frac{1}{2}$ inches, was completely denuded of skin. In this case, it being desirable to have the wound heal rapidly and with no evidence of scar, I determined to use grafts of normal skin sufficiently large to entirely cover the denuded surface. These grafts were secured from the patient's arms. The wound was dressed as in the other cases, the dressing being kept wet with bovine. March 17 the dressing was removed, and the wound was entirely healed, leaving no evidence of a scar whatever; but around the periphery there was some decided redness. This is probably the most rapid case of healing of this class on record.

CASE V. GREAT 12-YEAR OLD ULCER HEALED WITH APPLIED BLOOD, WITHOUT SKIN-GRAFTING.

Mike L., age 57, Irish. Diagnosis, ulcer of left leg. Admitted to hospital March 3, 1902. This condition was of about 12 years' standing, and during that time had never entirely healed. He had been treated at various hospitals and at various clinics and by private physicians, but said that he got no special relief. The ulcer was a large one situated on the calf of the leg, being 4 by $3\frac{1}{4}$ inches. It was covered with unhealthy granulations which exuded a foul-smelling purulent discharge. The surface of the ulcer was thoroughly cleaned up with a dermal curette, and dressed with a wet Thiersch pack. This was kept wet and not changed in 24 hours. At the end of the 24 hours this dressing was removed, the wound thoroughly cleansed with bovine and hydrozone reaction, followed by Thiersch irrigation, and dressed with bovine pure. The bovine dressings were changed twice in 24 hours, and the patient got a wineglassful of bovine internally, every three hours. March 23 the ulcer had healed with the exception of a small space at the upper periphery. This was touched up with a 25 per cent. solution of pyrozone, and dressed with bovine-pure, the dressings being renewed twice in 24 hours. March 30 the patient was discharged cured, the ulcer having become covered with healthy skin, and no scar tissue, it being almost impossible to tell it from the surrounding skin, the only difference being that it was a little redder.

CASE VI. VIOLENT ENDOMETRITIS CURED BY APPLIED BLOOD, WITHOUT CURETTAGE.

Florence B., age 30 years; American. Diagnosis, endometritis. Patient admitted to hospital March 2, 1902.

She was greatly anaemic and emaciated. Was so weak that she had to be carried from the carriage to her bed. Discharge was so profuse that unless proper appliances were used it would run from her almost constantly.

This condition had existed for four years, and during that period she had been twice curetted, but no result or relief obtained. Examination revealed the uterus to be in a highly diseased condition. So much so that I advocated a vaginal hysterectomy, or at least a thorough curettement. To these propositions both the patient and her friends absolutely declined to agree, and begged that I employ some other treatment. I, therefore, without any promise of result, determined to employ bovine injections and applications. On the 3rd March, after the patient's secretions had been regulated, I commenced treatment by washing out the uterus and injecting the solution of bovine and salt water, two-thirds bovine and one-third salt water, and tamponing the vagina with bovine-pure. Internally she was given two teaspoonsful of bovine every hour in peptonized milk and a little water. The vaginal injections and tamponing were employed twice in 24 hours, up to March 14. At this time the discharge had entirely ceased and the uterus was becoming smaller. The uterine washings now were employed once in 24 hours and, instead of bovine tamponings, vaginal injections of the bovine pure. Internally, the bovine was increased to a wineglassful every two hours. March 18 the patient was up, and went for a short walk, and returned in splendid condition. Had gained $4\frac{3}{4}$ pounds in weight. On March 23, the uterine injections were discontinued, and the vaginal injections employed once in 24 hours. At this time the uterus had assumed its normal size, and all evidence of inflammation had disappeared. The patient was looking and feeling splendidly, therefore local treatment was discontinued. April 1 she was discharged cured, but instructed to return at intervals for examination and continue the bovine internally indefinitely.

This case was certainly an extreme one and by all gynaecologists an operation would have been deemed, I think, an absolute necessity.

GONORRHEAL ARTHRITIS.

Jacobson gives a clinical lecture on this subject. The chief points in diagnosis are classified: (1) *Age*. Gonorrheal arthritis is chiefly met with between twenty and forty. It may occur in infants with gonorrheal conjunctivitis. (2) *Sex*. It is more common in males. This is prob-

ably explained by the numerous glandular recesses of the male urethra, which are reached by the gonococci. The disease is, however, not uncommon in women. (3) *Time of Onset.* Arthritis may sometimes occur early in the disease, but usually not for several weeks. The late appearance may be explained by the gonococci having had time to reach the posterior urethra and its annexes. Lorimer, from an examination of 250 cases, found the average interval in men six weeks, in women three months. (4) *Joints attacked.* These are usually the knee, ankle, elbow, wrist and shoulder. Arthritis with effusion generally attacks the knee, ankle and shoulder, the phlegmonous and peri-articular form the wrist and elbow. But any joint may be attacked, some of them out-of-the-way ones, such as the temporo-mandibular, sacro-iliac, etc. An ankylosed joint and wasted muscles of unexplained origin suggests a past gonorrheal arthritis. The arthritis is usually monarticular. When polyarticular, symmetrical joints are usually attacked. If several joints appear to be acutely attacked the disease soon settles in one and the rest clear up. (5) *Fever, Pain and Inflammation.* There are three types—the acute, subacute and chronic. The latter are more common. As a rule, the symptoms are less intense than in rheumatic fever. Swelling, redness and edema vary with the variety of the arthritis, swelling being greatest in hydrarthrosis, and redness and edema when the disease is mainly capsular and peri-capsular. (6) *The Discharge.* In many cases it is difficult to determine the existence of a discharge, especially in women. In men the arthritis usually occurs with a gleet discharge. The long vitality and latency of gonococci must be borne in mind. Neisser found them present in 80 cases of chronic gonorrhea; in 18 they had lasted over a year, and in 10 cases over two years. The cocci may easily be excited into activity by alcohol, excess of coitus, menstruation, pregnancy and curetting the uterus. In cases of discharge, due to other causes than the gonococci, joint complications do not occur, except in case pyemia occurs.

Diagnosis.—(1) *Acute Rheumatism.* In this there is more pain and fever than in gonorrheal arthritis. In gonorrheal arthritis the disease usually settles in one joint, and never becomes general as in rheumatism. Salicylates do not act in gonorrheal arthritis. In the latter there is no peculiar odour in the sweat, and cardiac complications are rare. (2) *Cellulitis.* The phlegmonous and peri-capsular forms may be mistaken for cellulitis, but the former begins about a joint, usually the elbow or wrist, and the severity

is less marked. (3) *Gout*. The joints attacked are usually different. A urethral discharge may occur in gout, but is rare.

Prognosis.—This depends to a great extent on the patient. Any lighting up of the discharge is likely to be followed by fresh joint troubles, and these are likely to be worse than the first. The vitality of the patient is important. A patient out of work, compelled to get about with his ankles and plantar fascia attacked, is a bad case to cure. The duration of the arthritis is an important factor.

Treatment.—The main points are: (1) Cure the discharge; (2) use fixation and supporting pressure to the joint by putting up in plaster of Paris. In acute cases it may be necessary to treat with fomentations or ice for a few days. When there is much effusion the joint should be aspirated before applying the plaster. In two or three days' time, when the pain has gone, the plaster should be reapplied or an india-rubber bandage applied over cotton-wool. If the feet are chiefly affected, it is important for the patient to get about a little, and a Martin's bandage is best used. When the plantar fascia is attacked, it is liable to soften and cause flat-foot. In such cases rest off the feet is necessary. After a week or ten days the joint should be ready for passive movements, friction, douches, massage and the Tallerman hot-air treatment, in order to prevent ankylosis. The liability to this is increased by prolonged fixation. The general health should be improved and a nutritious diet given. Salicylates and iodides are, in the author's opinion, useless, but iron and cod liver oil may be given.—Dr. Jacobson in *Guy's Hospital Gaz.*, Ref., *London Treatment*.

THE TREATMENT OF VENERAL DISEASES IN DISPENSARY PRACTICE.

The writer gives a brief statistical study of the venereal diseases taken from the case-books of the genito-urinary dispensary of the University Hospital of Pennsylvania. In all, these include a study of 6,587 cases of genito-urinary disorders. Of this number 4,890 belong to the class of venereal diseases, of which there were: gonorrhoea, 1,240; chronic anterior urethritis, 449; chronic posterior urethritis, 253; stricture, 420; chancroid, 452; chancre, 440; secondary syphilis, 479; tertiary syphilis, 157.

Gonorrhoea is more scientifically treated than formerly, the patients being thereby saved considerable

discomfort. The shortening of the disease, the aim of most of the newer methods of treatment, has not been accomplished. An investigation of the case-books shows that in the majority of instances gonorrhoea in dispensary practice is quite as protracted now as it was ten years ago.

In the treatment of gonorrhoea, about all the newer methods of the last ten years have been tried in the dispensary, but it has finally settled down to the following simple plan: During the first ten days or two weeks the patient is given two solutions for injection. The first is composed of permanganate of potassium, one-half grain to eight ounces of water. With this the patient is directed to flush the urethra with an ordinary hand syringe, which is filled six times, the procedure to be employed thrice daily. This is followed by a solution of protargol, ten grains to four ounces, which is injected into the urethra and retained for ten minutes. At the end of four days the permanganate is increased to a strength of 1-to-4,000, and the protargol to 20 grains to 4 ounces. After the second and third week a favourite prescription is:

R Zinc sulphate 10 grains
 Bismuth subcarbonate 2 grammes
 Solution of hydrastis (colourless) . . . 1-2 ounce
 Water to make 4 ounces

At the same time copaiba and oil of sandalwood are always given. Under this routine treatment the majority of acute cases get well in from six to seven weeks.

In cases of chronic urethritis where the disease depends upon stricture or granular patches, sounds are passed three times a week, followed by an irrigation of silver nitrate, beginning with a solution of 1-to-8,000, which is gradually increased to 1-to-1,000. In cases of chronic folliculitis, involving the glands along the urethra, a sound is introduced, covered with an ointment containing iodine and iodide of potassium. Chronic posterior urethritis is treated by massage of the prostate and irrigations of the urethra, with deep instillations of protargol. Three per cent. sulphate of copper and one and two per cent. nitrate of silver are of value in chronic disorders of the deep urethra.

Chancroids, where there is no question as to the diagnosis, are cauterized with nitric acid. The patient uses a dusting powder of iodoform two parts and acetanilid one part. As a substitute for iodoform, bismuth formic iodide powder has been used. Powdered chloretone is useful where there is pain.

The initial lesion of syphilis is kept clean, and as free from irritation as possible. It is washed with a 50 per

cent. solution of peroxide of hydrogen twice daily, followed by a dusting powder of acetanilid and iodine in equal parts. No constitutional treatment is instituted until secondary acute manifestations occur.

Constitutional syphilis is divided for treatment into two classes, the benign cases and the more severe form. To the former is given proto-iodide, one-third grain in pill form, three to four times a day. This treatment is continued for eighteen months. In the more severe cases increasing doses are given, until the gums are inflamed, or there is decided fetor of the breath. The number of pills requisite to bring about this condition is divided by two, the result being the dose which is to be administered to that patient. When mercury by the mouth is not assimilated, inunctions of mercury are employed. In tertiary syphilis mercury is always employed in conjunction with potassium iodide.—H. M. Christian in *Therap. Gaz. Med.*

OPERATION FOR SIMPLE DEPRESSED FRACTURE OF SKULL WITH COMA IN A CHILD.

Mr. Battle, St. Thomas' Hospital, London, operated on a child, aet. 2 years 3 months, who had been admitted a few days before after a fall of 20 ft. from a window on to the pavement. The child had not recovered consciousness since the injury; her eyes were constantly rotated downwards and to the right; she moved the left arm and leg; but the right arm and the leg did not respond to stimulus, and were rigid. A depressed fracture could be felt over and behind the left motor area. As the coma appeared to be deepening, it was considered best to trephine in the hopes that some clot might be found, the removal of which would relieve pressure on the cerebral substance. A semi-circular flap was raised and the skull trephined; the fracture was rather irregular, and there was not much depression. After the application of the trephine, a small quantity of clot was exposed on the surface of the dura mater, but it was insufficient to account for the symptoms. The opening in the skull was considerably enlarged by means of bone forceps, then an incision was made through the dura mater; there was no blood clot on the surface of the brain, nor did the cerebral substance look bruised; there was, however, an immediate and rapid flow of cerebro-spinal fluid. It was not considered advisable to explore the brain, the symptoms being insufficiently localized to point to any one centre or connected group of centres. The flap was replaced, no attempt being made to restore the bone. A drainage tube was left in the wound in order

that if any cerebro-spinal fluid continued to escape it might come away easily. Mr. Battle said that this was evidently a case in which there was probably contusion and laceration on the surface of the brain, in which the continued condition of coma was associated with excessive secretion of cerebro-spinal fluid, and, possibly, a progressive oedema of the brain in the neighbourhood of the injured portion. The depression of the skull was not regarded as a sufficient cause for the symptoms, the bone was not much depressed, and it extended over a fairly large area.

The result of the operation was very satisfactory, the patient being able to sit up in bed and take a penny with either hand within a week. For two days there was a discharge of cerebro-spinal fluid, and for some days the head was kept somewhat raised, and the child lying on her right side so as to gradually diminish the tendency to overflow from the wound. Mr. Battle said he considered the whole case interesting from the duration of the coma and from the rapidity of improvement after the operation. Bearing on the question of rapidity of recovery he mentioned a case that had been under his care some years ago:—

A boy who had been operated on for compound comminuted fracture of his frontal bone suddenly developed coma with left hemiplegia about eight days afterwards. The patient was taken to the operating theatre, and without need for an anaesthetic the right side of the brain was explored in all directions with a trocar and cannula, but no abnormal condition was discovered. It was thought that his state was a hopeless one, but next day he had recovered consciousness and spirits, and when the house surgeon went round in the morning the patient insisted on sitting up in bed and shaking hands with him, and there was no trace of paralysis left, and he left the hospital a short time afterwards perfectly well.—*Dublin Medical Press.*

THE INJURY TO THE YOUNG CELLS CAUSED BY THE COMMON SURGICAL DRESSINGS.

Robert T. Morris says that absorbent cotton is perhaps the most injurious of the dressing materials that are placed near the wound. Absorbent gauze and gutta percha tissue are harmful, and the various antiseptics used, while they may destroy pus, have also the power of destroying new epithelium and new connective tissue formations. Skilful neglect of wounds requires much experience. Lister's protective oil silk is one of the best dressings to lie next to the wound; an innocuous and valuable dressing for the

wound surface can be made by pouring collodion upon glass and peeling it off in a thin film after evaporation of the volatile part. Silver foil is becoming popular as a protective dressing. A dressing presented by the author is known as the Cargile membrane, first suggested by Dr. Cargile, of Arkansas, for the purpose of preventing the formation of peritoneal adhesions. The material, described in a recent issue of the *Medical Record*, is a very thin gold-beaters' skin, made from the peritoneum of the ox. It is pervious to moisture, and at the same time it does not entangle new cells. Its presence, as in animal membrane, seems particularly grateful to the tissues, and the author has not yet found a dressing that has been found so satisfactory as this material to lie next the wound. "Sulphite laps" is the best and cheapest absorbent dressing to be found, but as yet is not obtainable in the market. The combination of Cargile membrane and sulphite laps ought to become a popular one.—*Mobile Medical and Surgical Journal*.

PREVENTION OF STITCH ABSCESS.

Maylard (*Annals of Surgery*, January, 1902) holds that in the practice of modern operative surgery there are two, and probably only two, precautions where doubt must always exist as to the certainty on which a perfectly aseptic result may be expected. These two precautions deal with (1) the condition of the surgeon's hands, and (2) the condition of the parts to be operated upon, or, in other words, the state of the skin and deeper tissue. Convinced by the results of experiments that infective micro-organisms are derived from the sudoriferous and sebaceous glands of the surgeon's hands, the author advocates a precaution founded on the physiological basis of exciting these glands of the skin to act freely before the commencement of the operation. In the method described in this paper the hands are submerged for from five to ten minutes in hot water as hot as can be conveniently borne. The soddened surface epithelium having been removed by massage of the hands under water and the use of ordinary soap the hands are finally rinsed in warm carbolic lotion (1 to 40). In the preparation of the operator's hands, "soaking," it is tersely asserted, "is better than soap-ing." The author's method of sterilizing the skin and deeper tissues of the patient is based on the fact that it is possible to salivate a patient by the inunction of the surface of the abdomen with mercurial ointment. Such a result proves that the agent applied is carried by natural

channels—certainly the lymphatics—so as to produce an effect upon a comparatively distant region elsewhere. So long as the agent is kept in contact with the skin so long will these channels be engaged in transmitting it to other parts. It is inferred that when an operation is performed on parts whose lymphatics contain such a potent bactericidal agent as mercury, this should not only prove destructive to any micro organisms with which it might come into direct contact, but its presence should still further render the normal tissue unfit for the multiplication and development of these bodies. The author describes only his method of prolonged application of lanoline-oleate of mercury ointment to the skin over the seat of operation, and states that according to the results of careful scientific and clinical investigation, whilst chemical examination failed to afford any positive information, bacteriological investigation proved a material diminution in the number of micro-organisms, and the records of actual practice afforded incontestable proof of the value of the method.—*Indian Lancet*.

SEVERE EXTRINSIC TRAUMATISMS OF THE SPINE.

BY THOMAS H. MANLEY, M. D., NEW YORK, N. Y.

Severe spinal injuries reduced to an anatomical basis may be divided into two classes:

1. Those which involve the rachidian structures alone, the osseous, ligamentous, muscular and vascular.
2. Those in which the effects of violence fall with greatest force on the central organ, the cord, its meningeal investments, its ganglia or medullary substance.

The former, or extrinsic injuries, are much the more common, and though not so serious to life or function, may, by extension of pathological processes, involve the deeper or more vital parts; but in most cases they are recovered from, however, sometimes leaving deformity or impaired function.

The osseous structures of the vertebral column consist essentially of two parts:

1. A segmented whole, made up of the vertebral bodies, with an intervertebral substance, and an enveloping sheath of a tough, fibrous structure.

This, properly speaking, is the triple curved backbone, which supports the head and carries the whole trunk. This is a flexible structure which, within various limits, may be bowed or twisted with remarkable impunity.

2. The posterior stage work of the spinal column. The

vertebral apophyses, which serve chiefly the double purpose of providing a hollow tube for the cord and attachments for ligaments, muscles and tendons.

All the structures external to the theca spinalis are provided with an abundant circulation, while the cord itself and its membranes are but very sparsely supplied with vessels.

The primary extrinsic lesions of the spine are:

1. Contusions, blows or falls.
2. Sprains, hyperflexion or torsion.
3. Hemorrhage, intra or extrarachidian.
4. Fractures—simple and open.
5. Diastases—fracture and luxations.
6. Visceral complications.

Contusions, blows or falls on the back seldom involve danger to the spinal structures, except when the volume of force is great and concentrated on a limited area. The spinal defenses provide frequent immunity by sudden sinking of the head, the projecting shoulders and ribs, the iliac crests, the ponderous lumbar development and gluteal projections. A sudden violent blow over the neck is the most serious, because of the large sympathetic ganglia here located and its contiguity with the bulb at the base of the brain.

The pneumatic, thoracic areas are well calculated to resist shock, and lower down, afford protection to many of the solid, floating organs of the abdomen.

The spinal cord ends at the last dorsal vertebra, and hence, concussive force on the lumbar or sacral regions can only affect the terminal nerve ganglia and cords contained therein.

The effect of a blow on the lumbar or sacral region is from direct concussion and *contre-coup* effects, transmitted shock.

Sprain of the spine implies the effects of a complex force, with consecutive complex pathological conditions, entorse and arrachement; torsion with over-stretching or sundering of ligaments are invariably essential factors.

The neck, the most mobile segment, suffers most frequently, and grave sprains there are most commonly produced by the body being projected against the occiput, as in diving, or falls on the side of the head. The costal bases, which laterally support the thoracic spine, safeguard this segment against torsion injury. The lumbar region frequently suffers from sprains after great effort in various exercises, or in making heavy lifts with the spine in a laterally inclined attitude.

A severe sprain of a joint is always a serious accident; of the spine more so, because of vital and delicate organs which it encases. Spinal sprains may involve a diastasis of the vertebral segments, though generally the apophyseal articulations alone are engaged. In lumbar sprains the tendons may suffer rupture or luxation. Spinal hemorrhage may be broadly divided into two varieties, viz., that which occupies the cord and that which occurs external to the theca in any of the overlying structures. The former can never occur, as a primary, uncomplicated lesion; the latter, the extrinsic variety, occurs frequently in nearly every type of severe spinal injury; it is usually venous, it may take place in the vertebral hollow, along side the cord, or into the subcutaneous inter-muscular spaces, posterior to the apophyses.

The most confused ideas prevail in relation to "spinal hemorrhage," the prevailing impression being that the blood escapes into the meninges or the medullary elements of the cord (hematomeningeal), while quite invariably the blood leak is into the spinal canal (hematorachis). The latter is of itself rarely a cause for serious apprehension, but when complicated it becomes an aggravating factor in provoking pathological changes, tending to meningitis, or myelitis, ascending or descending. The gravity of this hemorrhage depends on its site, volume and complications.

Fracture of the spine should always be considered in a category separate to itself. This fracture may exist—a broken back—without any definite symptoms at all. Diagnosis of it, by any means known to art, may at times be absolutely impossible. When the spinal cord escapes impingement, as it does in the greater number of cases, *restitutio ad integrum* may speedily follow, or the fragments may unite, leaving an ankylosis or a deviation, most commonly a kyphos. This involves a deformity with impairment of function in the mechanical action of the column, in its oscillatory movements and its strength, but in no manner impairing the function of the cord.

Fracture of the spine is seldom attended with palpable displacement, the ligamentous attachments being so numerous and firm that the fragments are usually sprung into position automatically. This fracture only assumes a serious aspect when the cord is divided.

Diastasis, or fracture-luxation: A genuine, complete luxation of the spine, without simultaneous destruction of the cord, can be only imagined, it can never occur.

A displaced vertebral body is a diastasis and not a

dislocation, because the intervertebral junctions are not true joints, and luxation of the apophyses can only occur with coexistent fracture of an arch or pedicle, except in the cervical region. It is very frequently impossible to distinguish an apophyseal luxation from a fracture, except, possibly, in the neck, and even here a luxation of the vertebrae has often been suspected, when on autopsy none was found, but a fracture of the base of the skull was discovered. Again, I have known of an exploratory operation for luxation—fracture when none was discerned through the incision, but it was later known that one existed, three vertebrae further down.

Visceral complications, coexistent or consecutive to violent spinal injuries, are not infrequent. The thoracic and abdominal organs most frequently suffer. Mediastinal, pleural or pulmonary hemorrhage may occur after a fracture through the vertebral blocks or a diastasis through the intervertebral substance, in consequence of a laceration of the anterior ligaments and intra-rachidian plexus of vessels. The heart or great vessels may suffer from the effects of violent commotion of the thorax.

In the abdomen the kidney may suffer displacement, contusion or laceration; the spleen, pancreas or liver are liable to similar lesions; a distended gall or urinary bladder, or stomach may suffer rupture and leakage; the pregnant uterus in any stage may sustain shock, with the premature expulsion of its contents.

In many severe extrinsic rachidian injuries, through the spinal cord may previously escape such damage as will induce paralysis, yet later symptoms may follow, suggestive of meningeal changes, or disturbances of nutrition, and pronounced disturbance of the ganglionic connections with the sympathetic involved.

In all this class of traumatisms it will be well to be reserved in prognosis until at least the primary effects have been recovered from and function is fully regained.—*Cincinnati Lancet-Clinic*.

RADICAL CURE OF HYDROCELE.

From a large experience of the value of two or three-drop injections of pure phenol into an emptied tunica vaginalis testis. Drs. Coley and Satterwhaite have been so pleased with the results they obtained that they recommend the use of phenol in small doses for the radical cure of hydrocele. Their procedure consists in the use of a double trocar and cannula, the inner trocar tightly fitting

and projecting slightly beyond the outer and bearing a thread at its proximal end, so that it can be attached to any ordinary hypodermic syringe. The inner cannula, being attached to the syringe, is first filled with liquid phenol, and two or three drops injected. Such a small quantity of phenol could not affect the whole of the surface of even a moderate-sized sac, but the sac of a hydrocele is never completely emptied by tapping, and the remaining fluid is quite sufficient, with the added phenol, to excite the necessary adhesive inflammation over the lining membrane of the tunic. The use of pure phenol in this disease is not new, but in the past it fell into disrepute from the untoward results that followed from its use in excessive quantities. But to the authors we are indebted for demonstrating its utility and safety in small doses.—*Med. Press and Circular*.

GUNSHOT WOUNDS.

In gunshot wounds, when a round ball, or a conical one with small velocity, penetrates a fascia, the fibres of the latter may be so disturbed and crowded aside as to interfere much with probing and with drainage. Thus a probe may impinge upon a fascia so that no further advance can be made, and errors as to the actual presence or the direction of the bullet may easily occur.—*International Journal of Surgery*.

Jottings.

A hot bath at bed time will relieve many cases of insomnia.

Remember that kerosene oil and vinegar are good household remedies for the removal of pediculi and their eggs.

Iodoform odour may be removed from the hands by thorough washing in vinegar after the use of soap and water.

A single drop of the wine of ipecac repeated every fifteen or twenty minutes, will often produce the most marked relief both from vomiting and diarrhœa.

Five to ten drops of the tincture of gelsemium every four hours will almost invariably relieve that painful condition or backache commonly called lumbago.

Freckled people will rejoice to know that freckles may be removed by the use of corrosive sublimate; two to five grains to the ounce of lotion or ointment.

A single dose of from ten to fifteen grains of salicylate of sodium will often cure acute supra-orbital pain. It is safe to give it in every case where blood poisoning is suspected.

Dr. H. B. Staney says.—“Never try to introduce a catheter into the bladder where the prostate gland is enlarged without having the finger in the rectum to spread the lateral lobes apart and lift the point of the instrument above the sinus pularis.”

Perforation of the intestine frequently threatens toward the end of an attack of typhoid fever, and great caution needs to be observed in allowing a return to indigestible food during early convalescence. A disregard of this caution may lead to a fatal issue on the very threshold of recovery.

OBSTETRICS.

IN CHARGE OF

H. L. REDDY, M.D., L. R. C. P., London,

Professor of Obstetrics, University of Bishop's College; Physician Accoucheur Women's Hospital; Consulting Physician to the Western Hospital.

SUPRARENAL GLAND IN PRURITUS OF THE VULVA.

Two cases of pudendal irritation with marked pruritus are described. One, a young woman 18 years of age, ten days before coming under observation, was seized with a violent itching of the vulva and anus. Notwithstanding approved treatment there was no relief, and, in the meantime, the condition had become so severe that she was unable to leave the house. A local examination showed an intensely congested condition of the vulva and the lower part of the vagina, with increased secretion. A strong solution of suprarenal was applied to the part, which was followed by a rapid blanching of the mucous membrane. Momentarily the itching was increased, and then gave way to a slight burning sensation, which passed off in a few minutes. The effects of this application lasted for fourteen hours, when the itching recurred. A second application gave permanent relief.—F. S. Meara.

LACERATION OF THE CERVIX A CAUSE OF ABORTION.

The experience of the writer confirms him in the belief that lacerations of the cervix particularly those which are of some depth, are a frequent cause of abortion. A primipara can usually give some cause for an abortion, such as a misstep or a fall, but in those who have previously borne children, where there is a fissure extending

as high as the internal os that will admit the tip of the index-finger, or the integrity of the lower uterine segments is lost, there is a predisposition to abortion.—R. W. Rogers.

USE OF THE X-RAY DURING PREGNANCY.

Bouchacourt has found the X-ray thoroughly unsatisfactory in its application to the study of the fetus *in utero*. He finds by his experiments that the factors which interfere with vision of the fetus include liquor amnii, membranes, uterine wall, respiratory and voluntary movements of the mother, movements of the fetus, opacity of the maternal pelvic and vertebral bones, inequality of distance of different portions of the uterus from the plate, and unequal thickness of different portions of the tissues traversed by the X-ray.

TREATMENT OF RETENTION OF PLACENTA.

S. Grosjean favours tamponing the uterus as the simplest and safest method of obtaining the expulsion of a retained placenta, unless one has had sufficient experience in digital curettage. By the means which he advocates, Grosjean has succeeded in emptying the uterus in twelve of thirteen cases. It also arrested the hemorrhage which accompanied six of the cases. The placenta was expelled, on an average, at the end of fifteen hours. In four cases renewal of the tampon once or twice after twenty-four hours was necessary. In one of these the method failed entirely, although the packing was inserted four times.

APPENDICITIS AND PREGNANCY.

A. Herrgott reports two cases of appendicitis during pregnancy which terminated fatally in spite of operative interference. He holds that operation is demanded not only for all cases of appendicitis during pregnancy, but also upon all women having appendicitis who are susceptible of becoming pregnant. During labour the adhesions limiting the process are broken, infection becomes general, and the condition for treatment becomes very unfavourable.

NAUSEA AND VOMITING OF PREGNANCY.

J. M. Batten, after trying all the different drugs recommended for this trouble, has come to the conclusion that they are of no value. He has found that over feeding generally gives relief. Before rising the patient should have a hearty breakfast, and three other full meals during

the day. She should also have food near her bed at night, so that she may have something to eat if hungry. Fasting during the night is conducive to sickness in the morning, and possibly during the ensuing day.

MOLECULAR CONCENTRATION OF THE BLOOD IN ECLAMPSIA.

The examination of the blood of six cases of eclampsia leads A. Szili to the conclusion that the freezing point of eclamptic blood is practically the same as that of normal blood, a point which is almost constant. This he takes as showing that the permeability of the kidneys is not altered in the same way in eclampsia as in most uremic processes. He accordingly deduces the hypothesis that the supposed toxic substance which is the etiological factor of eclampsia is a complex molecule, perhaps an intermediate product of katabolic changes in the albumin molecule.

POINTS IN OBSTETRICS.

Hammamelis is valuable in the varicose veins and hemorrhoids of pregnancy. Use locally, and internally to full limit.

In threatened mastitis, use every effort to abort the abscess, both for cosmetic reasons and because a breast is never again so good a milk producer after it has once healed. Internally: give calcium sulfid, saline laxatives, and belladonna. Locally: apply belladonna, tincture of opium and lead water, and alternate this with tincture of opium, one ounce to $\frac{1}{2}$ point of sweet oil, applied hot and rubbed in well with gentle massage. Keep the breast under firm pressure at all times except when making applications. If pus form, evacuate promptly at lower part of gland; use an anesthetic so that all pus pockets may be searched out and thoroughly drained.

Never rupture the membranes in a primipara; and never rupture them in multipara till the second stage is well advanced.

Hirst prefers ether to chloroform in labour except in the presence of eclamptic symptoms.

Fifteen grains of chloral by the rectum, repeated once or twice, will mollify the early stages of labour.

It is good practice to give a dram of fluid extract of ergot as soon as the child is delivered. Before the ergot has had time to act the placenta will have been expelled or delivered, and danger of postpartum hemorrhage is averted.

While oxalic acid is one of the best emenagogs, one

must beware of using it in pregnancy, since it is a powerful oxytoxic and may easily induce abortion.

Never use the forceps in a normal labour till the head has been stationary for two hours. Never use them for no better excuse than to hasten the labour.

If the fetal vessels cease to beat for 10 minutes previous to delivery, it may be certain that the child is dead.

If a woman dies suddenly in full term labour, extract the child immediately by version or Caeian section.

Scale pepsin added to quinine will prevent vomiting, when given during labour in the enormous doses necessary to get the effect on the uterus.—*Medical World*.

AN EXPERIMENTAL STUDY OF THE URINARY ANTISEPTICS.

The writer has made a comparative study of the different antiseptics which are given internally for the purpose of rendering the urinary tract sterile. Some of these experiments were directed to ascertain the effect of the different substances upon urine which contained bacteria, or when the bacteria were added to urine which was aseptic. Of all the urinary antiseptics, urotropin was found to be the most efficient. In doses of sixty grains daily, the urine had a distinct antiseptic action upon micro-organism, whether contained in the bladder or added to the urine. Next to urotropin, salicylic acid was the most efficient. Sandalwood oil, methylene blue, salol, balsam of copaiba, had a distinct antiseptic action. Chloride of potassium, boric acid, and nva ursi had no appreciable action.—O. Sachs.—*Wiener Klin Wochen*.

TREATMENT OF PHLEGMASIA ALBA DOLENS.

M. T. Brennan claims to have obtained excellent results from the application of solutions of picric acid. He believes that this relieves the pain and swelling more rapidly than any other agent. He employs a saturated alcoholic solution and renews the dressings two or three times a day. An aqueous solution is used if the skin is injured or tender.

PRECOCIOUS MATERNITY.

Dr. Allen reports the pregnancy and parturition of a coloured girl aged eleven years, eight months, in the *Maryland Medical Journal*. Menstruation began at ten years, three months. Her child, of normal size, was born at term without complications. Both mother and child are now perfectly well.

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Editorial.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The half-yearly meeting of the above body, which is the Provincial Licensing Board of this Province, was held in the City of Quebec on the 24th of September. Two resolutions which were passed have given rise to considerable discussion in the daily papers of Montreal, and, to a certain extent, in those of Quebec. The first was a resolution, the result of a report presented by the Educational Committee—which report we know had received but little if any consideration from the English-speaking members of the Committee. This Committee met only a few minutes before the hour named for the opening of the College, and on the subject being brought before it, in the shape of a resolution, it was vigorously opposed by the two English members, Drs. Craik and McConnell. Time pressing, it was decided to bring the matter before the College and further discuss it there. This resolution declared that in future all who desired to present themselves for the Preliminary Examination of the College must produce evidence of having taken a *cours complet*. A vigorous protest against

it was made by all the English-speaking members—Dr. Craik said that such a resolution would act most injuriously on candidates of English origin, as the Protestant community had no such institutions, as had their Roman Catholic confrères—scattered all over the Province, and where education was received at a yearly cost of about one hundred and thirty dollars. For Protestants to take a somewhat similar course would cost from three to four hundred dollars a year, and, practically, meant the candidate taking the degree of B. A. While such a degree was desirable for these entering the Medical profession, the country, he felt sure, was as yet not prepared for it. Dr. F.W.Campbell took broader ground and opposed the resolution, because, while the College had every right to specify what examinations a candidate must pass, it had no right to specify by what means he must get the required education. Those who favoured the resolution said the object desired to be obtained by it was to have the candidates well grounded in the various subjects of the examination, and not permit them to cram for it by a tutor. Dr. Campbell met this by stating that during the twelve years he was secretary of the College, he knew that nearly every one who had taken a *cours complet* had found it necessary to employ a tutor before going up for the Medical Preliminary. This fact, and the additional fact that the number of rejections was, in his opinion, far beyond what they should have been, led him to try and find out, if possible, the cause. With this end in view he succeeded in getting a meeting of a large number of the heads of Roman Catholic and Protestant educational institutions in this Province. It took place in the City of Montreal, and the matter was freely and fully discussed.

The decision arrived at was that there was not a single institution in Quebec which gave an education which prepared a young man for the entrance examination in medicine. Dr. Campbell declared that, under such circumstances, to pass such a resolution was unfair to Roman

Catholics, and most unjust to Protestants. On the part of those of the Educational Committee, who passed the resolution, it is but fair to state that they avowed no desire to act unjustly toward the English-speaking community, and expressed a perfect willingness to accept as equivalent to a *cours complet*, the certificate of any College, High School or Academy, which gave a classical education, and was recommended by the English-speaking members of the College. Dr. Campbell still pressed his objection, affirming that several men occupying excellent professional positions, had, to his knowledge, been self-taught. Notwithstanding the earnest objection of the English-speaking members, the resolution was passed by a strictly national vote. This is, of course, not final, as the subject must come before the Legislature for adoption, when we know it will be strenuously opposed. In this connection we may say that many eminent men in the profession to-day oppose a classical education as being necessary for a medical man. Sir John Williams of the University College of South Wales is one of these, and the *Dublin Medical Press* in noticing his utterance says: "We are pleased that one occupying so conspicuous a place in the profession should have raised his voice against an indefensible adherence to an anachronistic system of education."

The next serious question which came before the College was the consideration of the Roddick Bill. A resolution in favour of it was negatived by a vote of 21 to 11. The minority would have stood at 13 if Drs. Lafleur and McConnell had not left for Montreal before the vote was taken. A second resolution opposing the Bill and directing the College to oppose any attempt to introduce into the Legislature the necessary measure for its adoption was carried by the same vote: 21 to 11. Several of the French-speaking members spoke in favour of it, but the great majority were fiercely opposed. In our opinion they failed to bring forward a single sound argument against it. We notice that since the meeting, the President of the Collège, accord-

ing to one or more of the Montreal papers, affirms that when the Governors of the College have had time to give the Bill full consideration, they most likely will give it their support. This, in our opinion, is begging the question. The College is presumed to be a body of intelligent physicians, and to say they require more time for consideration is absurd. It is six years since Dr. Roddick first introduced his Bill before the Dominion Parliament, and six months since it was passed. It has been discussed by every medical journal in, and by most of the newspaper press, of Canada. Nearly every member of the profession in the Dominion has received a copy of the Bill. Ample time for its consideration has been given, and the vote in the College of Physicians and Surgeons was the result of that consideration. We are informed that notwithstanding this adverse vote, it is Dr. Roddick's intention to proceed, as soon as the Quebec Legislature opens, with the necessary measure, to put his Act in operation. Moreover, we believe that he will succeed, for promises of support have been given him from very strong quarters. Possibly, the Quebec College of Physicians and Surgeons may learn that it were better if its members were more modern and up to date in their views. In many ways we feel that they have much to learn, and if they are wise they will commence the necessary education forthwith.

AN OBJECT LESSON IN SANITATION.

We have, at least once before, written on the wonderful results of sanitation, which have taken place in Havana, since its occupation by American troops, and which still continues under the same direction although the great bulk of the troops have been withdrawn and Cuba started on its own lines as a republic. Certainly the transformation has been marvellous and should be an object lesson to the whole world.

One of the greatest achievements is the very marked reduction in the mortality of the island, and especially

in the city of Havana. First in importance in this connection is the almost absolute eradication of yellow fever, which formerly played so important a part in making Cuba's cities places to which capital and people feared to go. Investigations leading to the discovery of the part played by the mosquito in the transmission of yellow fever, were made with the Cuban funds, under the direction of the military government, on the lines indicated by it. As a result of these investigations, Cuba has been practically free from yellow fever during the past year. The few cases which occurred were readily controlled, and the disease did not spread. A systematic vaccination of the entire people is being carried on from month to month, while a campaign against glanders, which has been very prevalent throughout the island, has been brought to a successful conclusion, the government reimbursing the owners of afflicted animals to the extent of 50 per cent. of the estimated value. This plan elicited the hearty co-operation of the people with the government, thereby making possible the results accomplished. The medical authorities are now devoting themselves to the control of tuberculosis, and are preparing a sanatorium near Havana for that purpose. All hospitals are fitted with wards for the treatment of tuberculous patients, and the campaign against this disease is being carried on in a thoroughly effective manner. The result of this work has demonstrated that the island is a healthy and safe residence for Anglo-Saxons. A large part of the credit for this sanitary reformation is due to Major W. C. Gorges, Surgeon United States Army, who is the Chief Sanitary Officer of Havana. In a private letter to Major Ronald Ross (quoted by the *British Medical Journal*), Major Gorges says: "The work here has been much more successful than I had hoped when we started. There seemed to me very little prospect for accomplishing much when we commenced in February of 1901, but as you will see from our reports, our results have been most positive. For the first time since the English occupation, 1762, we have had an October free from yellow fever, and malaria decreased more than one-half. Mr. Le Prince, directly in charge of mosquito work,

estimates that mosquitoes have been decreased 90 per cent. by the work, as compared with this time last year. Of course this is a difficult statement to substantiate; it is a matter so much of individual opinion. But I have convinced myself that they have been greatly decreased. My own quarters on the bay front, where they have always been very bad, have had none practically for the last six months; and I know many other localities where similar positive statements can be made. But this is certain, that last October we had seventy-four deaths from yellow fever; this year no deaths and no cases; and from malarial fever, last year twenty-five deaths; this year nineteen. This, I am convinced, is entirely due to the mosquito work. The disappearance of yellow fever, however, I think is almost altogether due to the killing of infected mosquitoes at the infected point. We do this by burning pyrethrum powder in the infected house and all the neighbouring houses. It is extremely gratifying to see how promptly the focus of infection is stamped out in this way; and it has been likewise surprising to me. I knew that some mosquitoes must escape from the most careful mosquito hunt, but we have apparently entirely controlled the disease this year by this method, when the conditions were exceedingly favourable for its spread. It must be that there are only a few infected mosquitoes in each individual case, and that they remain pretty close to the point of infection. And this probably is rendered greater, if we consider that it takes a mosquito fifteen or twenty days after biting before he himself is able to transmit the disease. If fifty mosquitoes bite a yellow fever patient, it seems to me quite probable from natural causes that only four or five would survive the eighteen or nineteen days required to render them dangerous. This sanitation was started and continued under the direction of General Wood, who was originally a medical officer of the United States Army and was named Governor of Cuba. Now that his office has ceased to exist, it will, in all probability, be continued by his chief sanitary officer, Dr. Gorges. We feel that both of these gentlemen have earned, not only renown, but the gratitude of the civilized world.

THE TREATMENT OF TYPHOID FEVER.

The *Dublin Medical Press* of July 16th last says:—There are certain diseases that seem ever to be in the experimental stage of treatment. And evidence, not alone of the restless nature of the physician of to-day, but also of the progress of scientific knowledge. Of this latter class is typhoid fever, a disease which exemplifies in a peculiar manner the prevalent theories of disease. To-day we recognize that it is due to a toxin that shows a marked predilection for the adenoid tissues of the small intestines, as strychnine and other such poisons do for the muscle tissue. In typhoid the toxic products of Eberth's bacillus are as clearly recognized by their effects as are effects of eloterium or pilocarpine. But how does the toxin producing bacillus gain entrance to the body. In the pre-bacteriological days the text-books told of the poisonous vapours of decomposing products absorbed through the pulmonary air-cells. We then found the ground shifted and adapted to meet what was considered the requirements of the discovery of the bacillus. The alimentary canal was discovered to be the site of infection, and the introduction of the bacillus was accounted for by want of proper cleanliness—the soiled apparatus and stained linen not having been removed prior to their being dried up, and, as such, becoming sources of infection. Withal, some physicians were not satisfied with all this explanation, and a diligent search commenced for the primary colony of the germ of the disease, and naturally enough an endeavour to attenuate or destroy it. From these researches Dr. Wasdin concludes that the primary germ colony of disease cannot be considered as occurring in the intestinal canal, but to be normally located in the respiratory tract—a theory which recalls that of the past, and one which in part accounts for the rare case of typhoid in which the clinical symptoms without the normal pathological conditions are not present. According to Dr. Wasdin's report, the bacillus toxin from the blood current gives rise to all the well-known terminal expressions: infection of the intestinal canal, the serous membranes, the bone marrow, and so forth. To reach the affected area in the lung an

atomised solution of acetozone is used, and the same drug is given in casuples three times a day. When the temperature threatens to be dangerously high, cold sponging is recommended. The good effect of the treatment is stated to be marked from the first by an increased secretion by the kidneys, a decided lessening of the malodorous character of the stools, which become sterile. By the combined action of the oral administration of the drug, and its inhalation as an atomised or cloud fluid, the advocates of the therapy claim that they reduce the possibility of gaseous fermentation and its concomitants, haemorrhage and perforation, and at the same time the destruction of the secondary infection of the canal by the typhoid organism, thereby averting further toxæmia by absorption from the alimentary canal. The germicide is, therefore, to be directed against both the primary colony in the respiratory tract, and the secondary expression in the alimentary canal. The benzoyl-acetyl-peroxide, which has long been known as benzozone, the antiseptic used by Dr. Wasdin, is a nonpoisonous product of the aromatic series, prepared from benzoic acid. The antiseptic and non-poisonous properties of the chemical are well known, and its use in toxæmias can be tentatively recommended. The treatment attacks the disease on an entirely new principle, the theory of which has much to commend it, not the least of which is the innocuous character of the therapeutic agent employed.

THE EXERCISE VALUE OF DANCING.

The Dublin Medical Press of the 9th of July, last says:—Dancing is a pastime proper to the seasons unfavourable to outdoor sports, and apart from its social advantages, it is entitled to regard, if only by reason of the muscular exercise which it entails, since this is indispensable to health. A correspondent, also an amateur statistician, has taken the trouble to calculate the distance covered by dancers in their gyrations. He finds that a value of average duration represents approximately a run of a thou-

sand yards. This is the longest dance, with the exception of the quadrille, which, with its four figures, covers nearly 1,800 yards. The mazurka is only equivalent to about 900 yards, and the polka to 800, while the lazy *pas de quatre* is barely 700 yards. Carrying his statistical ingenuity still further, he estimates that the usual series of dances at an ordinary ball, beginning at 10 p. m. and finishing at 5 a. m., represents no less than 56,000 steps, equivalent to nearly 25 miles on level ground. Admitting that the dancers are few in these degenerate days who go conscientiously through the entire list of dances provided for their entertainment, the fact remains that each man (and woman) who does his (or her) duty accomplishes a very respectable amount of exhilarating exercise. The value of exercise from a physiological point of view is greatly enhanced by its exhilarating effects, and this is one reason why the daily "constitutional" fails to yield the health-giving effects of cycling, golf or dancing, the only drawback to the last named being the lack of fresh air and sunlight, which add so materially to the enjoyment and salutary effects of all forms of outdoor exercise.

SO-CALLED "CHRISTIAN SCIENCE."

While it is totally incomprehensible to the practical, hard-headed common-sense individual, that any one should pursue such an intangible chimera as "Christian Science" with such sublime faith as to depend upon it in the presence of serious bodily illness, certain it is that the disciples of this vicious religious monomania are increasing in number and temporal power, and that it is no longer safe to entirely ignore it as a menace to the health and well-being of the community. Both the medical and secular press have devoted considerable attention to the subject, largely in the way of ridicule, but the most powerful, logical and altogether unanswerable argument we have yet seen is comprised in a series of short lectures by Rev.

Andrew F. Underhill, of St. John's Episcopal Church, Yonkers, N. Y., entitled "Valid Objections to So-Called Christian Science." Realizing that their interests are identical with those of the medical profession, and that the enemy of one is the enemy of both, the Arlington Chemical Company is anxious to do its part in relegating this absurd cult to the limbo of oblivion where it may rest peacefully side by side with the many foolish fads that have preceded it.

Appreciating the force of the argument referred to, and being convinced that it will place in the hands of the physician a well-forged weapon wherewith to combat such a subtle and dangerous enemy, the Arlington Chemical Company has obtained the permission of the author to reprint these lectures in booklet form and distribute them to physicians. If any of our readers have been overlooked in the mailing, a request to the above company will bring a copy.

Dr. Osler relates an anecdote of Dr. Benjamin Winslow Dudley, of Lexington, Ky., who was one of the most famous lithotomists of his day. No surgeon in the South or West had such a reputation, and he more than any one else built up the fame of the Transylvania school. In 1837, a poor lad with stone was brought to him from one of the distant settlements. The operation was successful and when the parents asked Dr. Dudley for his fee, knowing their circumstances, he refused to take anything. The young lad was deeply impressed by the generosity of the great surgeon and made a resolve that if ever he became rich the fee should be paid. About two years ago one of the heirs of Dr. Dudley had a letter from W. G. Saunders, of Iowa, stating that he was anxious to make arrangements to pay a long-standing indebtedness and asked if a fee of \$500 would be suitable for the operation of lithotomy performed on him by Dr. Dudley in 1837. Last year the executors of Mr. Saunders wrote that in a codicil of his

will directions were given to pay the fee with interest and they had much pleasure in handing over the sum of \$2,390.

Dr. McHull, of Atlanta, Ga., writes to *American Medicine*, that he had occasion recently to look through the death certificates in the office of the Board of Health. The following were assigned as causes of death in certain cases: "Broken thye," "bad blood," "hemorrhage from nable," "mesals," "heart dropse," "bilious liver," "grastritis," "angina becgrois," "ptesis." "Parlices" caused death in one, while "perrallisis" was the cause in another. Multitudes died of "colery infantum;" a few of "colarah morbus;" one physician was not sure whether it was "dirhea" or "disentary;" another, however, was quite sure that "dyorhear" was the cause of the death of his patient. One infant succumbed to "choaking croup;" another patient passed away for "want of proper treatment."

Book Reviews.

Progressive Medicine. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia, assisted by H. R. M. Landis, M. D., Assistant Physician to the out-patient department of Jefferson Medical College. Vol. III., September, 1902. Lea Brothers & Co., Philadelphia and New York, 1902.

The present volume embraces diseases of the thorax and its viscera, including the heart, lungs and blood vessels; dermatology and syphilis; diseases of the nervous system and obstetrics. As an epitome of the literature of these subjects for the last three months is given, it will readily be understood that it is quite impossible to critically examine and comment upon such a mass as is included in this volume of four hundred pages. We have, however, passed several hours in reading the most important of its contents, and have been struck with the practical character of the majority.

The chapter on Diseases of the Lungs, by William Ewart, of London, while emphasizing the fact that one disease, pneumonia, has not made much progress for many years towards successful treatment, yet intimates that its future seems decidedly bright. We note, and with pleasure, that the "lost art," bleeding, is once more being recommended for employment "in the early stages in strong middle-aged subjects with difficult respiration and heaving pulse." We have, in the early years of our practice, seen such immense relief follow its employment in several such cases, that we have never ceased to wonder at its not being used. The employment of the anti-pneumococcus serum has been tried by many, but not one seems to write of even average success. We find perhaps the most satisfactory part of the treatment of this disease, as recorded in this volume, is that by the carbonate of creosote (creosotal), a paper on which we published a few months ago. The success, as recorded by more than one writer, has been phenomenal. The portion devoted to Pulmonary Tuberculosis brings up to date a subject which, as the whole profession is aware, is to-day the burning question of the hour. We have been particularly struck with the recommendation of Robinson (*British Medical Journal*, Feb. 22, 1902), which we fully endorse, that wards should be set apart in all general hospitals for the treatment of phthisis, both as a humanitarian duty, and also for the important object of medical education. At present it is doubtful if many graduates of the present time are able to follow a single case of phthisis from commencement to the end. In that part devoted to diseases of the brain some interesting cases of brain tumour successfully removed are recorded.

The fourth and last, but not least, article in the volume is prepared by Richard C. Norris, of the University of Pennsylvania. That it is well done goes without saying, as is all that appears from Dr. Norris' facile pen. The entire ground of obstetrics, covering pregnancy, the management of labour, obstetrical surgery, tumours complicating pregnancy, labour obstructed by pelvic deformity, placenta previa, post partum hemorrhage, the management of puerperium and the care of the newborn infant have been gone over in a painstaking way that insures the reader of *Progressive Medicine* a complete *résumé* of all that is new in these important branches of the subject.

In short, this volume will be found to contain all that is new on the subjects which it covers.

In medical literature so vast is the number of volumes and periodical articles which annually appear that no practitioner can hope, without such an aid as *Progressive Medicine*, to keep abreast of the rapid advances that take place, and no one who attempts to do his duty by his patients can afford to be without these volumes, and there is no one, however well he may be posted, but can find ample material well worthy of his careful investigation and study.

F. W. C.

Reynolds' & Newell's Practical Midwifery. A Manual of Obstetrics for Students and Physicians, by Edward Reynolds, M. D., Assistant in Obstetrics, etc., and Franklin S. Newell, M. D., Assistant in Obstetrics and Gynecology in Harvard University Medical School, Boston. In one octavo volume of 531 pages, with 253 engravings, and 3 full-page coloured plates. Cloth, \$3.75, net.—Lea Brothers & Co., publishers, Philadelphia and New York, 1902.

The authors in the preface state that this work is written in a dogmatic style so as to be more useful to students and for teaching purposes. There would only be one ground possible for writing a work like this in such a manner and we feel that they have thoroughly justified their assertion—"Of all the books on the subject lately printed we have come across no book so well calculated to teach the student modern obstetrics." It must be highly commended. All who desire to learn obstetrics should have a copy of it.

H. L. R.

Disease of the Anus, Rectum and Pelvic Colon. By James P. Tuttle, A. M., M. D., Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital, Visiting Surgeon to the almshouse and workhouse hospitals. D. Appleton & Co., New York, 1902.

The volume is of convenient size, printed on good paper, with eight coloured plates and three hundred and thirty-eight illustrations. Credit is due the publishers. The subjects treated have been dealt with in a thorough and systematic manner. The author has had a wide experience in rectal diseases and has set forth his views and methods in such a way as to be both pleasant reading and of real value to the general practitioner when he is called upon to treat diseased conditions in this field of surgery. The book shows that many advances have been made within the past few years in this field of surgery. Both improved methods of examinations and treatment have been clearly presented. Chapter 1 deals with embryology, anatomy and physiology. Chapter 2 discusses malformations of the anus and rectum. Chapter 3 is devoted to methods of examination and diagnosis. We were interested in reading the article on hemorrhoids and glad to find the clamp and cautery advocated as the operation of choice in the radical cure. It is claimed that where the operation is properly performed hemorrhage is practically never met with. This has been our own experience. Stricture, too, may be said to never occur. Throughout the book treatment of the various diseased conditions has been gone into in detail, a character of the work which is sure to be appreciated.

F. R. E.

CANADA MEDICAL RECORD

NOVEMBER, 1902.

Original Communications.

SEPTICEMIA AND THE CURETTE.

BY H. PLYMPTON, M. D., BROOKLYN, N. Y.

To attempt to break up an old established custom in any line of life is at best a thankless job, and one likely to call down harsh criticism upon the head of the daring iconoclast.

To attempt to uproot old prejudices existing in favour of a certain line of practice in surgery, and diametrically oppose such practice, is to invite from some, adverse criticism of the harshest kind. The only recompense for this is a logical refutation of, or concurrence in the argument advanced, on the part of other members of the profession.

This latter is what I hope for, and if I provoke a discussion, or start a line of thought in the minds of half of the readers of this article, I shall have achieved all I started out to do.

Curetting the uterus to remove fragments of after-birth or other debris has been taught in our Medical Schools from time immemorial, and it is firmly fixed in the receptive and retentive mind of every Medical student that the first move following any such abnormal uterine condition is to cleanse the uterus by means of the curette.

That the organ should be thoroughly and aseptically cleansed admits of no argument, but that the work should be done with the currette I deny most emphatically.

The majority of cases of death following the decomposition of foetus or placenta in utero are caused by the use of the curette, and I hold that septicemia may be avoided if a more rational procedure be resorted to.

The condition of the uterus containing septic matter is one of great congestion, the thickened walls being coated internally and over the os with a thick, brown, tenacious mucus.

The congestion is active, and therefore the more dangerous in the event of the admission of septic matter into the circulation.

If the curette is used, denuding the walls of their protective covering, an immediate vaccination takes place with a septic virus, septicemia following in an incredibly short space of time (chemical metamorphosis is marvellously rapid in the circulatory system), and death quickly ensues.

If, without using the curette, we can remove the septic matter from the uterus without disturbing the mucus covering, and enable the uterus of itself to expel the coating, we shall have taken a long step forward in the treatment of this class of uterine cases.

The uterus by reason of its congestion may be made to perform a self-cleansing act by exciting the exudation of the serum of the blood into its cavity, thereby washing itself out, and expelling all septic matter instead of absorbing it.

This process of exosmosis is induced by a properly combined alkaline solution at a temperature above 100° and a strict avoidance of bi-chloride, carbolic acid, formaldehyde, or any antiseptic of an acid reaction or astringent nature, which would coagulate the fibrine and albumen of the blood.

My method of procedure is as follows:

First, the gentle removal of whatever fragments are lying in the uterine cavity, by means of forceps, care being taken not to tear from the walls any adherent piece.

Second, the gentle flushing of the uterine cavity with the alkaline solution (110°), the reservoir containing the fluid being not more than two feet above the level of the hips.

If the flushing could be continuously administered for a few hours (say two or three), the conditions would be more speedily reduced to normal, but the discomfort of the position of the patient (on a douche pan), prevents this, and a flushing once every two hours with one quart of solution is about the limit of treatment.

For flushing the uterus, I use a small dilating uterine douche, and as there is plenty of room for the escape of fluid and fragments, there is no danger of fallopian colic or salpingitis.

The first flushing is frequently followed by contractile pains and expulsion of any previously adherent pieces, together with much of the mucus.

A tablet of Ext. Cannabis Indica, gr. $\frac{1}{4}$.

“ Ext. Ergotin, “ gr. $\frac{1}{2}$.

every hour till desired effect is produced will contract uterus and alleviate pain.

The bowels should be moved freely, both by enema and catharsis.

During the interval between douches, the patient should be kept on her back with the hips sufficiently raised to permit the retention in the vagina of as much of the alkaline solution as it will hold.

The rapidity with which this treatment will reduce temperature, relieve pain, stop vomiting and remove offensive odor is marvellous to one who has not tried it. Sometimes two flushings are sufficient to cleanse the uterus thoroughly, vaginal douches being all that are needed subsequently to complete the work.

Uterine congestion is speedily relieved, and the uterine discharge changes from brown, thick, bad smelling mucus to a thin transparent one, accompanied or followed by more or less of a flow of blood.

A reduction in the frequency of the flushings is desirable as soon as a tendency to return to normal conditions begins to be observed, as it frequently will within twenty-four hours. Then simple vaginal douches every three hours with an occasional uterine flushing if symptoms indicate it.

The action of exosmosis (and endosmosis, for there is every reason to believe in the absorption of some of the fluid) is what is desired to relieve the existing congestion, as in bronchitis, pneumonia, congestion of kidney, congestion of any mucous membrane, etc., and is the most rational means of restoring to normal condition.

I do not wish to be understood as decrying the use of that most valuable instrument, the curette, but only the abuse of it, to wit: its employment under such conditions as make it practically a sharp weapon loaded with septic matter, dangerous beyond the poisoned arrow of the Malay, or the fang of cobra, and utterly opposed to our modern ideas of antiseptis.

PROCEDURE IN POST-MORTEM MEDICO-LEGAL EXAMINATIONS.

BY CHARLES A. HEBBERT, M.R.C.P., London,

Professor of Anatomy, Bishop's College, Montreal.

CASE 7.

This case is published for the purpose of bringing forward several points in the cases of presumed infanticide and to draw attention to the law on the subject, and further, to demonstrate some ill-defined or imperfectly understood conditions which a medical jurist may have to determine or elucidate, and probably lead by such methods to some clearance of the difficulties he may have to contend with. It may be stated that the inquiry was as to the death of an illegitimate child born in secrecy, the mother being alone and seated on the water closet at the time of birth.

EXTERNAL APPEARANCES.

The body was that of a male infant, 19 inches in length, weight 8 lbs., the testicles were in the scrotum, the finger nails projected beyond the finger ends and the toe-nails were at the level of the toe ends. The umbilical cord was attached. The whole length of the cord was $3\frac{1}{2}$ inches, of which 1 inch showed an irregular obliquely torn margin. There was no sign of ecchymosis in this margin. There was an ecchymosis over the glabellum, and the upper lip was swollen and showed some marks of bruising. The lower lip and chin were free from bruising. The tongue was clenched between the gums. The surface of the body was pallid and *rigor mortis* was present.

INTERNAL EXAMINATION.

Head.—No fracture of skull. Brain normal. The tongue, with larynx, pharynx, trachea, œsophagus, lungs, heart and thymus gland, were removed *en masse*. The lungs floated in water and had been fully aerated. There were no ecchymoses visible on the pericardium or pleura. The larynx, trachea and bronchi down to the third and fourth division appeared healthy, and there was no reddening or softening of the mucous membrane in any part of the tract.

The Heart.—The right side was engorged with black fluid blood.

Abdomen.—The stomach was empty. The mucous membrane pale and no ecchymoses noticeable. Small intestines empty. Large intestine contained some meconium.

The liver and kidneys were apparently normal in structure, but somewhat dark in colour, and congested. The spleen was normal. Bladder empty. The verdict returned was that the child had been born alive at full term and that the cause of death was probably due to asphyxia.

COMMENT.

The first point of importance in this case was how far the mother was responsible for the death of the child, and

whether or not a charge of homicide should be brought against her? The child was expelled in the pan of a water-closet, the mother being alone and unattended; the child was born alive, but died before severance from the mother, as shewn by the absence of ecchymosis in the foetal end of the cord. The placenta was removed from the mother some hours later with some difficulty on account of firm adherence to the womb. This fact with the ragged appearance of the foetal end of the cord would indicate a forcible tearing of the structure, as might occur on a woman suddenly arising from the seat of a closet, the weight of the child on the one hand and the firm union of the placenta to the womb on the other hand causing a sudden fracture of the cord at the point of least resistance.

The bruising of the glabellum and the upper lip, the two most prominent parts of an extended head in delivery, would suggest the impact of those parts at the time of expulsion on the hard floor of the basin and the fact that the basin must have contained various fluids would account for the cause of death, partly from asphyxia, partly from shock, and it may be added from the fragility of a newborn child's life. Every practitioner knows how hard sometimes it is to preserve a child's existence on birth even under the most favourable surroundings, and how much harder it must be for a child to survive under the circumstances of non-attention, the complete ignorance of the situation and the terrified state of the suffering woman at such a time.

The verdict that the mother should not be incriminated was obviously just.

Now, the next point of importance is the law on the subject.

The law humanely assumes that the child has been born dead until the contrary is proved, and in this accepted proof the question is involved as to when does a child become a human being.

The Criminal Code, 1892, 55-56 Vict., c. 29, criminal offences, Part xvii., section 219, defines:—

A child becomes a human being within the meaning

of the Act when it has completely proceeded in a living state from the body of its mother, whether it has breathed or not, whether it has an independent circulation or not, and whether the navel string has been severed or not. The killing of such a child is homicide when it dies in consequence of injuries received before, during or after birth.

SECT. 271—KILLING UNBORN CHILDREN.

1. Every one is guilty of an indictable offence and liable to imprisonment for life who causes the death of any child which has not become a human being, in such a manner that she would have been found guilty if such child had been born.

Now, in this case it was clear that the child had legally become a human being, because it had fully breathed, but, at the same time, had died before it had an independent circulation from the mother, as shewn by the evidences of the umbilical cord.

The question is, under which section the woman could be indicted? It was clear that the cause of death was not the result of either wilful neglect or criminal interference, but rather due to the fright and lack of attention attending such a situation, and it would have been a grave mistake to have prosecuted the woman on the more serious charge. On the other hand, she could not be liable to the minor charge, as the child had been pronounced a human being. Separate existence ought to be more clearly defined. Should a child which has breathed, but has not had a separate circulation, be considered as the victim of homicide? The law says yes, but the foregoing is a case which might suggest some emendation of that clause.

I have thought this subject worth airing and considering, for the issues may be very important, involving the liberty or even the life of a person.

In the first section of the code quoted, a child is accepted as a human being if it has breathed, without a separate circulation, or has had a separate circulation without having breathed, or either the first or second condition

whether the cord is severed or not, and the charge is homicide if this being dies by interference. It might be reasonably argued that, biologically, a being is not a being until the functions of life, breathing, circulation separate from the mother have been completely established and the being is organically capable of maintaining its own existence.

This, then, is the dilemma; legally, a human child is a human being with a possible imperfect separate existence. Biologically, it is not until the separate life of the organism is complete and self-maintaining.

I have consulted several eminent lawyers on these points, and they fully appreciate the legal difficulties which may arise. I have brought forward this case as suggestive, and to invite some comment and argument on the subject.

Selected Articles.

THE DIFFERENTIAL DIAGNOSIS OF PLEURITIC EFFUSIONS.

BY DR. ALEX. VON KORANYI, PROFESSOR AT THE FACULTY OF
MEDICINE AT BUDAPEST.

It is well known to clinicians that many cases of pleuritic effusion are difficult, if not impossible, to delimit by percussion owing to one or more of the solid organs, such as the liver, lying in the immediate neighbourhood of the effused liquid. These cases, rare though they be, are sufficient to prove the existence of certain defects in our means of clinical investigation. The importance of Traube's space in the diagnosis of left-sided effusion is also a factor in the diagnosis of all such cases, one, too, that should not be overlooked in the delimitation of the chest. This is a space which is often filled by increase in size of the liver, the heart, or the spleen, and these conditions require to be differentiated from pleuritic effusion. The space is in the lower part of the thorax lying between the liver and spleen. This, the so-called Traube space, is often the most difficult to percuss owing to the frequency of its being filled with fluid, while above it may be found the consolidated lung, fluids always gravitating to the low-

est level. In this case the crescentic outline of the lung will still be observed whether the dulness be present or not. The same difficulty prevails posteriorly in defining the limits of the lung and spinal column. It is with this object in view, and to elucidate the utility of transsonant percussion, that the author has approached the subject.

If the stethoscope be placed over a solid organ of the body at a point where it approaches the parietes, and the part percussed at the same time, a peculiar sound of a shrill ringing character will be heard. This sound continues as long as the percussion is within the parietal contact limits of the auscultated organ, but ceases immediately the limit is passed. By this means the surface contact of a parietal organ can be accurately delineated on the surface of the body. The author has marked out the boundaries in many obscure cases by this topographical percussion, which could not have otherwise been accomplished. The author uses a simple binaural stethoscope with two india-rubber tubes fitted with olive-shaped vulcanite ends for the ears. The point of the left index finger is pressed well down into the surface of the body and then struck with the firmly extended finger of the right hand. This form of percussion is a slight modification of Reichmann's, who employed a rod to press into the surface, which he struck with the finger in percussing. Either method may be employed in this form of auscultation, and the results obtained will be in proportion to the operator's experience of the particular method, as the principle is the same, though reduced to its simplest form in the striking of the finger.

The method adopted by the author is to press the point of the left index finger well into the thorax, and then strike it with a finger of the right hand; either method gives a similar tone by the stethoscope. Long and careful observation is absolutely necessary to prevent mistakes. One point might be noted for the benefit of those who have not practiced this form of auscultation, viz., that the distance between the finger and the stethoscope must not be too great, or the sound may be so altered as to lead to error; it is therefore necessary that the finger should slowly and methodically follow the stethoscope in percussing the organ. Again, the ribs are good conductors of sound, and may lead to error if the finger be not well pressed down between them, more particularly in the neighbourhood of the sternum. In the event of one's not being able to get between the ribs, an assistant may be directed to place his hands on the chest on either side of the point which is under examination; for instance, one on the sternum and

the other on the lateral wall of the thorax. By this device the author has been able to percuss the most complicated cases with excellent results.

This form of auscultatory percussion enables one to analyse the dullness of a number of organs lying in very close proximity to each other, which can be done with perfect accuracy and ease, when the heart, liver, and stomach are clearly defined.

This method of diagnosis is particularly valuable in left-sided pleuritic effusion. If the stethoscope be placed on the outside of the cardiac area it will be found to have extended far into the effusion if followed to its outer border. In percussing the exudation itself it must be borne in mind that the upper part of the dullness does not accurately define the limit of the effusion, as more accuracy will be required to define the line of demarcation between the compressed lung and the fluid. If the thorax be percussed behind, it will be difficult to limit the effusion externally, as the lung will gradually sink; but if percussed towards the spinal column it will be found to go across the medial line, towards the right or healthy side.

The lower margin of the fluid is another important feature in the diagnosis, which practically should extend from the twelfth rib posteriorly along the margin of the thorax to the front, but in practice it will be found to be far below the marginal vault of the thorax, as the exudation by its own weight tends to push the diaphragm down, and thus distend the pleural sac in that direction. On the other hand, the empty lung will be found, not in the complementary space made by this depression of fluid, but highly placed in the posterior part of the thorax about on a level with the ninth rib in the scapular region. It will be seen that the defining of an effusion is a long and tedious process, and entails what in many cases is unnecessary labour; but questions do sometimes arise that tax our ingenuity to the utmost to delimitate effusions from some other morbid change that may lead us astray in operating—for instance, if it be doubtful whether the case is pleural effusion or pneumonia or whether there is effusion with pneumonia. This can easily be differentiated by placing the stethoscope within the scapular line and slowly percussing outwardly. If a pleural effusion exist the dullness will follow the costal curve, but if it be pneumonia without effusion the alteration in sound will be two inches higher than the curve. By the same process of examination both sides may be high and reveal double pneumonia, while an effusion in both sides would be two inches lower than the normal.

The author urges that no one should be without this knowledge in the diagnosis of disease, which can only be made practical by long experience and careful observation. Its value is not confined to the delimitation of Traube's space, as he has already shown, but may be extended to many obscure cases constantly presenting themselves to the clinician.

In conclusion, it should be noted that the thick muscular masses on both sides of the spinal column are good conductors of sound, and may lead to an erroneous conclusion when percussed by the resonant method; but if the scapular line be taken as a guide there is less risk of error.—*Dublin Medical Press.*

THE EMPLOYMENT OF DIGITALIS AND ACONITE IN THE TREATMENT OF CARDIAC DISEASE.

By H. A. Hare, M. D., Professor of Therapeutics in the Jefferson Medical College,
of Philadelphia.

Among all the difficulties which have beset the subject of the proper use of drugs in disease, and there have been many, as we all know, it cannot be doubted that the factor of greatest importance has been the employment of remedies by physicians without their having a correct conception, and sometimes no conception at all, of the pathological process underlying the condition which is to be relieved. This depends upon the fact that many practitioners lack preliminary training, not only in morbid anatomy and morbid physiology or pathology, but also fail to study the possible effect of well-known drugs in abnormal states. The employment of certain remedies in disease has cast discredit upon therapeutics by their abuse, while many physicians who have carefully studied diseased organs become so saturated, so to speak, with the seriousness of the lesions which they find, that they scoff at the thought that drugs can be of service, forgetting that the vital powers are eliminated at the autopsy, and that the conditions present represent a state so grave that death has taken place—that is, the worst possible state of affairs is seen. I have made these opening remarks because I do not wish to be considered a therapeutic optimist or nihilist, and because I so often emphasize the fault of using drugs when they cannot do good that I fear I may be called a therapeutic unbeliever. In no class of cases

does what I have said hold true with greater force than in those of cardiac disease. Some physicians are content to diagnose valvular disease, prescribe digitalis, and ignore the state of the heart muscle, the state of the blood vessels and that of the kidneys, liver, and even the dose of the drug, so long as it is within bounds not poisonous.

It has always seemed to me that it is the duty of the physician to study the condition of the heart muscle, and almost entirely exclude any suppositions as to the condition of the valves of the heart. While this may be an exaggerated way of making the statement which I wish to emphasize, it is resorted to because in the majority of instances we are apt to endeavour to decide which segment is diseased without a correspondingly careful study of the condition of the ventricular wall.

Again, it is by no means an uncommon practice of physicians, after determining more or less carefully the condition of the heart, to fail to make a careful study of arterial tension, pulse force, and, equally important, to attempt to discover whether there is arteriocardiac fibrosis. Upon the condition of the heart muscle, and upon the development of arteriocardiac fibrosis, much more depends in the diagnosis, prognosis and treatment of a case of so-called cardiac disease than is usually thought. It is also not permissible to reach correct conclusions in regard to these important factors in the case unless at the same time the renal condition is adequately investigated. And, again, it is not sufficient in many of these cases to be content with one or two examinations of the urine, which may fail to reveal albumin, unless at the same time estimations of urea are also made, and a careful record of the quantity of urine and of its specific gravity is kept. Not only do these renal conditions aid us in getting information concerning the probable conditions of the heart muscle and of the blood vessels, but they also give us an insight into the ability of the kidneys to eliminate poisonous materials and the drugs themselves, both of which, if retained to an abnormal degree, produce results which are disadvantageous.

I have within the last few years devoted a great deal of attention, not only to these factors in these cases, but as to the question of the proper administration of the various cardiac stimulants, and, equally important, as to the dose which each individual patient needs from day to day.

Digitalis, like iron, has proved itself so valuable, doing good in so many instances which seemed grave, that we are

wont to forget that, like most things which do good, it can also do harm, and judging from my previous habit, and from the habit of other practitioners, I am convinced that in the great majority of instances digitalis is administered in doses which are much too large, and often continued over a period which is far too long. It is by no means an uncommon thing to find physicians administering as much as 10 or even 20 minims of tincture of digitalis three or four times a day in cases of marked rupture of compensation. There can be no doubt that in some cases such doses are necessary at the beginning of the treatment to meet the crisis which exists, and in much the same way that we are wont to give large doses of mercury in early syphilis, afterward cutting the doses down one half, so it may be necessary at times to give massive doses of digitalis which, after a period, should be rapidly and considerably diminished. I have been surprised to find what excellent results I could produce by the use of such small amounts as one or two minims of an active, physiologically tested tincture of digitalis given three or four times a day, the patient being, of course, required to rest and so give his heart that most needed therapeutic aid when its compensation is ruptured.

Apropos of this, I may add that in my belief we often fail to get results from doses and from drugs upon which we rely, more because we are careless as to the physiological activity of the product than because we have made an error in judgment as to the remedy which is needed, or the dose which is required. With the important subject of the employment of drugs closely related to digitalis in the treatment of various cardiac conditions, there is not space to deal in this paper. In deciding what cardiac stimulant is required in a given case, we must not only consider the condition of the valves and the myocardium as already indicated, but we must, if possible, reach some conclusion in regard to the state of the coronary arteries. Digitalis, which improves the nutrition of the heart, largely by improving the circulation in these arteries, can manifestly do more harm than good, if these nutritive vessels are so nearly closed that it is impossible for the heart to pump blood through them in increased quantity. And again, the myocardium may have undergone such advanced degeneration that it is impossible for the digitalis to improve the nutrition of the heart, although at the same time it may be driving the remaining healthy fibers to an endeavour far in excess of their ability.

I am also quite sure that in a certain number of cases of valvular disease the patient does not require digitalis or any other cardiac stimulant for the relief of his cardiac symptoms ; but, on the other hand, in addition to rest, will often be greatly benefited by the administration of aconite, which has the same steadying effect upon the heart through its influence on the vagi as has digitalis, while by its sedative influence on the heart muscle in cases of excessive compensation, and by its relaxing effect upon the blood vessels, it diminishes the overaction of hypertrophy which is sometimes confused with the tumultuous overaction of ruptured compensation. It is much easier for us to conclude, in the case of valvular disease, with dyspnea and disturbed heart action, that these symptoms are due to a failing heart than that they are due to a hypertrophy and an excessive activity. Such cases I have frequently seen in men who are well developed, in the muscular sense, and whose occupation has caused them to do heavy manual work, or to take part actively in some of the severe athletic games. And not infrequently have I seen other cases in which the use of well-balanced doses of aconite and digitalis have produced results which neither drug could produce by itself, although at first glance they are physiological antagonists.

Finally, the utter uselessness of expecting good results from either of these drugs in the treatment of certain cases of myocardium disease which persistently take severe exercise "for their health" needs to be emphasized. I have repeatedly seen cases of men of advanced years with somewhat fibroid blood vessels who have mistaken the heaviness of advancing years for the heaviness of lack of exercise, and who on the golf field, on the bicycle, or by rowing or walking, have tried to drive away the symptoms from which they suffer, with a result that sooner or later the condition from which they are suffering becomes greatly aggravated, and they become more or less invalids if they are so fortunate as to escape sudden or nearly immediate death from their ill-judged efforts. It seems to me, too, that when we are attempting to treat such cases, and are endeavouring to administer doses and remedies as accurately as possible, we should insist upon quiet and a careful mode of life until we are able to determine that the remedies suit the case, for otherwise the change of exercise or change in diet may not only prevent the remedies from doing good, but also warp our judgment as to our own plan of treatment, and prevent us from instituting it in another case, when in

reality, had proper precautions of this kind been taken, we would have increased confidence and been able to do much good to a large class of patients, for it is not to be forgotten that every one in this room sooner or later, according to his years, his inheritance, and his mode of life, develops more or less arteriocardillary fibrosis, degeneration of his myocardium, and sclerotic changes in his kidneys.

I may close by saying that curiously enough a very large proportion of the patients to which I have recently referred are physicians who, after a long life of intense nervous strain, not infrequently find themselves at a comparatively early age suffering from disorders of the heart, which they fail to recognize, either because on examining this organ they fail to discover murmurs, or because they do not recognize the fact that a physician's life seems to be peculiarly apt, as is that of the banker and large business manager, to develop degenerative cardiac change. The employment of strychnine, belladonna and other drugs, in connection with digitalis and aconite, might be discussed if time permitted, but they are not included in the title of this paper, and, therefore cannot be considered. — *The Therapeutic Gazette*.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

TREATMENT OF ECLAMPSIA.

In the *Therapeutische Monatshefte* for April, 1902, Veit asserts that we do not yet possess a rational treatment of eclampsia, because the exact nature of the disease is still unknown. The treatment, therefore, must be such as is found to be the best from experience. The main object is to check the attacks and obtain the spontaneous labour. Some say that expectant therapy is the best, and as soon as the child is born spontaneously the disease is at an end; others,

on the contrary, say that we must terminate the pregnancy, for only then will the attacks cease. In Veit's opinion both are wrong. Neither is a good treatment. Morphia is advised by G. V. Veit, and Cæsarian section is advised by Halbertsma. None of these means can be applied to every case of eclampsia.

In treating any given case, first of all the strictest anti-septic rules must be observed during labour, because eclamptic patients are particularly predisposed to puerperal infection. Secondly, the quantity of food and remedies per os must be limited, as the somnolent patients are threatened with aspiration pneumonia. Thirdly, each vaginal exploration should be made under narcosis in order to avoid irritation. These are the prophylactic measures which the author usually follows. The treatment itself depends upon the general and local conditions of the patient, and especially upon the dilatation of the cervix. When the os is totally dilated and the presenting part of the fetus is high up in the pelvis, in spite of the good general condition of the patient at the onset of the first attack of eclampsia, the extraction of the child should be done under narcosis. When the external os is not completely dilated, our conduct will depend upon the state of the cervical canal. If the last is totally soft above the external orifice there is no danger in dilating the cervix; this can be done with two fingers or with a slight cut in the sharp pendulated border of the cervix. At the first eclamptic attack delivery should be done at once. When the cervix lets in only one finger and the canal is yet intact, our conduct should depend upon the patient's condition.

At the beginning of eclampsia every effort should be made to tear the membranes in order to diminish the tension of the uterus and allow the pain to become stronger. If in spite of these measures more attacks follow, it is recommended to apply a dilator. As soon as the canal is dilated, extraction should be made at the first convulsion. In this case administration of morphine is indicated, not with the expectation of complete removal of the attacks, but to render them less severe. Some obstetrician reported aggravations of symptoms after injections of morphine. Although it is difficult to form a definite opinion, it is, nevertheless, certain that it renders the attacks less severe; it is, therefore, only a symptomatic remedy. If we have recourse to it occasionally, it should be used as early as possible. Among other nar-

cotics we may mention chloral hydrate (per rectum), which can be administered in 15-grain doses repeatedly. Little benefit can be obtained from the bromides, veratrum viride, or amyl nitrite. Venesection has been recently recommended. A rapid cure cannot be promised, but amelioration of symptoms, and especially lessening of cyanosis, can thus be readily obtained. Some follow up the venesection by saline infusions, as the disease is supposed to be of toxic nature. The practical importance of this treatment is still slight. Next to this treatment are hot baths, which gained the utmost confidence; their effect is produced by diaphoresis. If hot baths cannot be employed, Jacket advises the use of wet sheets.

In spite of their favourable influence, the means mentioned cannot cure eclampsia, no matter how correct the theoretical considerations are; the complete practical result has not been obtained of any of them. Cæsarian section and *accouchment forcé* are advised by some, but in the author's opinion they cannot be applied to uncomplicated cases of eclampsia. For the last eleven years, among 11,000 confinements, he observed fourteen cases of eclampsia, and only one died; it makes a percentage of 15.8. Among operated cases the mortality is very high. However, in the hands of skilful operators Cæsarian section and *accouchment forcé* are not always fatal.

The conditions are different when with a narrow cervical canal the convulsions increase in intensity and frequency, the labour does not advance, and the patient's condition becomes aggravated. The choice of the method will depend upon the patient's surroundings. The author was called to the country to see a patient; Cæsarian section would imperil her life because of surroundings unfavourable to an operation. With one finger in the cervix he took hold of one foot and extracted the child. Combined version in such cases is recommended. Dührssen obtained good results with cervical incisions and vaginal Cæsarian section; others, on the contrary, obtained less favourable results. In case the cervix is entirely closed, a question arises whether eclampsia has anything to do with the pregnancy. Narcotics should be given then and patients kept under observation. Should the attacks repeat themselves in a threatening manner and the patient's condition become aggravated, while the cervix is still closed, pregnancy is at fault. Then the classical Cæsarian section is indicated in preference to the vaginal route. Here Cæsarian section is easier and less

complicated than a confinement through the vagina with a closed cervix.

These various ways of treatment are in accord with the most modern views on the subject. It certainly does not follow that they are perfect and complete. Our efforts should be directed toward the pathogenesis of the affection, as well as to a better study of the normal anatomy and physiology of pregnancy. The method of study of cytotoxins is particularly worth mentioning, because we find in normal pregnancy, and especially in eclampsia, certain cells in the circulation of the mother, under the influence of which anti-toxins are formed. From researches the author made in conjunction with R. Sholten, they were astonished to find albumin in the urine after the placenta was transplanted in the abdomen. When it will be possible to show that the albuminuria of pregnancy is analogous to the cytotoxic albuminuria produced experimentally, we will have in our power the foundation for a new therapy which may lead to a proper understanding of the affection; but, unfortunately, the time has not yet arrived for a definite opinion on the subject.—*Therapeutic Gazette.*

DYSMENORRHEA.

The *British Medical Journal* of May 17, 1902, contains an article by Herman, in which he gives the following advice:—

Spasmodic dysmenorrhea has no tendency to spontaneous cure. A patient has been known to suffer from it throughout the whole of her menstrual life. In cases of exceptional severity it may grow worse. About twenty-five years ago the writer saw a patient, then aged about forty-five, who had suffered ever since her catamenia began from pain every month so severe as to make her vomit. In her early youth she consulted Sir James Clarke, who was at that time physician to the Queen, and was by him advised not to have any local treatment. As she got older the monthly attack of vomiting came to last longer and longer, till at length she was almost continuously sick. In some cases in which pain has lasted long and been severe it has seemed that the body of the uterus was larger than in most nulliparæ, as if some hypertrophy had taken place. But it is so difficult to be sure of a slight increase in size that this is only a conjecture.

The natural cure of spasmodic dysmenorrhea is

pregnancy. But the disease is often accompanied by sterility, which may be cured by the dilatation. In about one-third of the writer's patients who were married and sterile, the cure of the dysmenorrhea was followed by pregnancy.

The best drugs for the relief of uterine colic are antipyrin and phenacetine. In slight cases these give adequate relief, and as we know, not of any harmful results from their occasional use, if these drugs relieve there is no need for further treatment. If these drugs fail, powerful narcotics, such as morphine or chloroform, will, if given in sufficient doses, quiet the pain, and cases have been known so bad that the pain could not be otherwise controlled. But it is a bad thing for a young woman to use these drugs every month, and, if this is necessary, local treatment which will remove the pain is preferable.

In a few cases the writer has found that guaiacum removed the pain. He gives ten grains of guaiacum resin in a tablespoonful of malt extract, twice or three times a day, beginning a week before menstruation is expected. He does not know how this drug acts, nor how to pick out the cases that it will cure; but he knows that it sometimes will cure.

The local treatment of spasmodic dysmenorrhea is to dilate the cervix. This is best done by the passage of bougies. In most cases the cervical canal will admit a No. 6 bougie easily. A little resistance is usually met with when about No. 9 is reached. When a bougie has been passed which entered with difficulty and fits tightly, after it has remained two or three minutes in the canal, it will be loosely held and a size larger can be passed. The writer has generally continued the dilatation until the bougie met with considerable resistance. This usually begins with the passage of No. 12 or thereabouts. He knows not what is the minimum dilatation that is sufficient to cure. He has known the passage of a No. 8 bougie, in a case of spasmodic dysmenorrhea and sterility, to be followed by pregnancy. Before the introduction of dilatation as a means of treatment it was known that occasionally menstruation could be prevented from being painful by the passage of the uterine sound shortly before its occurrence. Hence extensive dilatation is not always necessary. The enlargement of the canal that dilatation produces lasts for some months, and one would suppose that the larger the dilatation the longer will the effect last, but the author has few facts with which to support this opinion.

The cervix does not always yield to the dilating agent

with the same readiness. In about one-sixth of his cases the author has it recorded that unusual resistance was met with. The fact of such unusual resistance does not in his experience modify the prognosis.

Dilatation does not invariably cure. The author has gone through some records of cases to find out what proportion of cases are cured. He found that in at least two-thirds of cases benefit follows. That no relief followed in one-third of the cases dilated does not imply that one-third of cases of spasmodic dysmenorrhea are incurable; it is partly accounted for by some cases having been dilated in which the dysmenorrhea was not of the spasmodic kind. In some of these cases the patients' statements may have been misleading; in others, diagnosis was known to be doubtful, and the dilatation was done either because nothing else offered any prospect of benefit, or for some reason other than the cure of the dysmenorrhea. But allowing for the inclusion of these cases, it must be admitted that some cases of spasmodic dysmenorrhea are not cured by dilatation. Some cases are not cured even by pregnancy. The author believes that he is within the truth when he states that cure follows in three-fourths of the cases. Among his cases in which the disease was primary (that is, dated from the beginning of menstruation), the proportion of cures was larger than among those in which the pain began to be felt at a later age. How long does the benefit last? It is so difficult, for reasons that need not be gone into, to keep such patients in communication with their physician, that nothing very exact can be said about this. The cure may last throughout the patient's whole menstrual life. One patient, whose cervix the author dilated in 1878, she then being aged twenty-seven, he saw in 1900. She had menstruated with little or no pain ever since the dilatation, and the irregularity of the menopause had begun. This justifies the assertion made. In some cases the cure is temporary only; the pain returns, and is again removed by further dilatation.—*Therapeutic Gazette*,

VARIETIES OF ENEMATA AND METHODS OF PREPARING SAME.

Of much practical value is a knowledge of not only the indications for the employment of rectal injections, but the different varieties thereof and their immediate method of preparation. A physician's resources are oftentimes abundantly

enlarged by a practical adjustment to circumstances in this direction. For instance, purgative enemata may be necessary in patients who cannot well bear, or who respond feebly to cathartics by the mouth. After abdominal operations a purgative enema may be called for, and also in cases of intestinal obstruction and in many varieties of abdominal pain. Then, again, to supplement aperients given by the mouth cathartic enemata may be resorted to, likewise in almost all cases preceding operative work in the abdomen. An aperient enema should also be given before rectal and vaginal examinations, and before the administration of an anesthetic.

The simplest form of an enema for unloading the bowels is a mixture of soft soap and warm water, the activity of which may be increased by adding about half an ounce of turpentine, a handful of salt or a little molasses. In lieu of a watery enema (sometimes objectionable on account of the quantity necessary—one to three pints), four to six ounces of warm olive oil, two to four ounces of castor oil, or one ounce of glycerine, may be used. A little turpentine will aid any of these. Turpentine has always seemed especially valuable when there is much intestinal flatus.

Nutrient enemata become highly valuable in quite a number of conditions, among which may be mentioned persistent vomiting of pregnancy, gastric neuroses of other types, gastric ulcer, and other gastric diseased states, various intestinal conditions and operations upon the stomach and bowels, and sometimes in diseased conditions of the mouth, throat and esophagus. Nutrient enema usually are made up with peptonized milk, to which is added beef tea or extract, beaten eggs, various gruels and brandy as may be desired.

A cleansing enema should always precede one containing nourishment. A disregard of this rule has caused many a failure.

Normal salt solution, consisting of one dram of salt to one pint of water at a temperature of 100° F., is now very commonly employed to overcome collapse after operations and general shock from hemorrhage or other cause.

In cases of heart failure, opium poisoning and other forms of depression, stimulating enemata are many times of value. These may consist of brandy and hot water, strong hot coffee, aromatic spirits of ammonia with hot water. While the water should be hot, care should be exercised that it is not at such temperature as to damage the mucous lining of the bowel.

Medicines may sometimes require administrations per rectum. Chloral, the bromides, strychnia, opiates, etc., in proper solutions and dilution undoubtedly can be made effectual in this manner. In order to be certain of the use of the full portion of the drug, when used in this way, it is best to make a separate and smaller mixture of the medicament which may be injected and followed by such quantity of diluent as can readily be retained. In this manner one can be certain of the administration of all of the drug intended.

The old "starch and laudanum" enema, so often mentioned in text-books in relation to the treatment of diarrhea, has frequently been misapplied or not used at all because of ignorance in its preparation, and thus a means almost always readily at hand is lost. The starch and opium enema is made up as follows: a tablespoonful of ordinary starch is rubbed up first with cold water, a thin paste resulting. Boiling water is then added to the consistency of thick gruel. When the preparation is cool, such quantity of the tincture of opium as desired is thoroughly incorporated. A high injection with a soft tube is always best.

If a patient can for a time maintain the knee-chest position after an enema, so much the better; but if not, it is more desirable to lie prone upon the abdomen or upon the left side.

Only gentle force should be exerted in giving a rectal injection.

In the experience of some, cold solutions for purgative effects have appeared better, and not without reason is it argued that cold enemata, and not warm, are indicated in those conditions where they are employed almost constantly.—*The Clinical Review.*

EUCALYPTUS IN THE TREATMENT OF DIABETES.

In the *Glasgow Medical Journal* for May, 1902, Faulds details his investigations as to the value of eucalyptus in diabetes mellitus.

What seems very interesting is the fact that, when the patient gets a fresh warm infusion, the sugar at once drops in quantity, and in some cases from 60 grains to half a grain per ounce. It is evident, then, that there is not any one of the substances contained in this infusion that arrests the excretion of sugar, but, evidently, a combination of them have this effect—*i.e.*, there seems no alkaloid in it which, when given alone, has the power of influencing the amount

of glucose in diabetic urine. Then how and why does the fresh infusion act so promptly? The writer thinks that, just as a newly infused cup of tea is an enjoyable beverage, not on account of the action of its alkaloid theine alone, but because it contains, in addition, a mixture of a volatile oil and tannin, so does tea from eucalyptus (which we know has antiseptic properties) act in checking tissue metamorphosis, which is so active in this disease.

The causation of glycosuria is still wrapped in mystery, but it is probably produced by a variety of causes, such as gout, cold, nervous exhaustion and over-indulgence in food and drink. In fact, any condition that tends to limit or prevent the appropriation of sugar must lead to an excess of sugar in the blood, and thus to glycosuria. In these cases it seems that in the earlier stage the eucalyptus treatment will prove beneficial; but where the disease has been inherited, or where the patient's antecedents or immediate relatives are neurotic (in which case the probable cause is a progressive degeneration of the vasomotor centers of system which will disturb the equilibrium of the blood-supply to the hepatic cells), this treatment, like others, will be of no avail. And such has been the author's experience; for, in forty-one cases treated with eucalyptus, eleven came from talented families, or were neurotics; seven were hard brain-workers, and four inherited the actual disease. In these twenty-two the eucalyptus treatment had no effect. Add to these four cases in which the disease had gone to the stage of approaching coma before this treatment had been commenced, and we get the total number of unsuccessful cases. The remaining fifteen showed a total disappearance of the disease, and so far as can be judged are completely cured.—*Therapeutic Gazette*.

NIGHT SWEATS IN PHTHISIS.

All physicians know the difficulty of keeping the night sweat of phthisis in control. Almost every known remedy has been tried since the Greeks used agaricin down to the present. Graves and Stokes used Dover's powder, which in time gave place to mineral acids, zinc and belladonna, atropine, and a host of other specifics. To the long list Nolda adds tannoform, the external use of which he recommends. In seven out of eight cases in which he had the front and back of the thorax dusted with powdered tannoform, it checked the sweating (*Berl. Klin. Woch.*). This

method of treating the symptom has the advantage of not interfering with the digestive function, which is usually so imperfectly performed in such cases; neither does it in any way preclude the use of any of the other antisudorifics. The powder of itself should prove an agreeable application to the skin, and promote the comfort which is such an essential factor in producing sleep in such cases.—*Dublin Medical Press and Circular.*

HOW TO SLEEP SOUNDLY.

The "sure cures" for insomnia are almost innumerable. One of the latest is that of a German, Prof. Fischer (*Doctor's Magazine*), who claims that it will not only bring about profound and refreshing sleep, but also increased mental strength. The discovery consists essentially in putting the pillow or pillows under the feet instead of the head. The advantages claimed for the innovation are that the venous circulation is favoured and the heart needs to work less during sleep, hence the tired feeling on waking is prevented. The professor claims to be in receipt of a great many communications from ladies all over the German Empire who are profuse in their praises of his epochal discovery.—*Denver Medical Times.*

LEUCOCYTES AND DIAGNOSIS.

The importance of a microscopic examination of the blood in the estimation of both red corpuscles and white is coming to be more and more recognized, not only in diseases of the blood, but in those of a general nature. In many undefined cases it is found that the point of diagnosis is immediately cleared by a blood examination. Thus, in typhoid fever lymphocytosis is the rule, while leucocytosis is stated never to occur unless there is some complication. As the latter is the rule in most infectious diseases and inflammatory conditions, the value of the distinction is obvious, more especially as the lymphocytosis in typhoid occurs early, along with a leucopenia, some time before the Widal reaction is established. An examination of the blood is stated to distinguish at once a case of early typhoid from one of pneumonia or influenza. Again, a marked leucocytosis occurs in such conditions as appendicitis, pyosalpinx

and suppurating ovarian cysts, thereby distinguishing them, not only from typhoid, but from malaria, in which leucopenia is the rule. And not only in the early stages of disease is the condition of the leucocytes of assistance, but during its progress any marked increase or diminution in their number points to some change of importance in the patient's system. Thus, a sudden leucocytosis in typhoid very frequently points to a perforation. The whole subject is very well summarized in a recent paper by Dr. Brown of Baltimore (*Medical News*, July 26), who quotes two cases in which a sudden increase in the number of leucocytes from about seventeen to thirty-four thousand per cmm. synchronised with a perforation of the appendix. *The Medical Press*.

THE MEDICINAL TREATMENT OF TUBERCULOSIS.

While not denying the importance of the hygienic treatment of tuberculosis, especially as conducted in sanatoria, the writer believes that the medicinal treatment should not be neglected.

The writer has used ichthyol in his clinic in great variety of cases, many of them advanced. The most noticeable and most constant effect was the diminution of the bronchial catarrh. This diminution showed itself in the lessened amount of sputum and the partial disappearance of the rales. Secondly, an increase of weight and an improvement in the general condition was noted. One advantage of ichthyol is the fact that it can be used for long periods of time without unpleasant secondary effects. It may be used with advantage in cases of actual or threatening hemoptysis, on account of its vaso-constrictor effects. In short, the writer believes that it should be given a trial in all cases not too far advanced.

If we expect to derive benefit from ichthyol it must be given in large doses and for long periods of time. The following formula is convenient:

R	Ichthyol.	10
	Aq. menth. pip.	80
	Syr. simpl.	20
	Mix.	

During the first week one teaspoonful in a glass of water is given daily, half being drunk in the morning, half in the evening. During the second week two teaspoonfuls in two glasses of water are given daily, to be taken at

four times. The dose is slowly increased in this manner until eight grammes are taken daily. In comparatively robust cases the dose may be increased as above, but daily instead of weekly.

Ichthoform is given in powders of ten to thirty centigrammes (grs. iss to ivss), ten powders being given daily. Its action resembles that of ichthyol, but it seems to have a particularly favourable effect upon the bowel disturbances accompanying tuberculosis. The meteorism, colic and diarrhea are effectively combated and a greater ingestion and assimilation of food made possible.

Sodium salicylate was given as an antipyretic. With few exceptions its use caused a drop in the maximum temperature from 102° or 104° to 99° , and of the average temperature from 100° to 98° . During the use of this drug tuberculin injections produced little or no rise of temperature, and cannot therefore be used as a diagnostic aid. Sodium salicylate must be used steadily for months if we desire to cure the fever, as the temperature promptly returns to its former height if its administration is interrupted. The drug is best administered in powders of one gramme (gr. xv) each, followed by a glass of water. Of such doses, four to six are taken daily; when the fever is unusually high, eight to ten. The former number produce no effect on the blood pressure, while the latter do cause a fall (10 to 12 mm. Hg.) of the same.—*Interstate Medical Journal*.—ERRICO OF RENZI (*Berl. Klin. Wochenschr.*, 1902, No. 18).

TREATMENT OF TUBERCULOUS PERITONITIS IN CHILDREN.

Rotch summarizes the treatment of tuberculous peritonitis from a study of sixty-nine cases treated at the Boston Children's Hospital.

The most common age of incidence in childhood is one and a half to four years. In the first year of life it is very rare and almost universally fatal, as at this time it is almost invariably part of a general tuberculosis. Pathologically, the cases may be divided into primary and secondary cases. The secondary cases are most often those infected from lungs, intestines and mesenteric lymph nodes. Where the lungs or the intestines are the primary cause, the prognosis is that of general tuberculosis, so that laparotomy is seldom of avail. Where the tuberculosis is primary in the mesenteric lymph nodes, laparotomy is often of value and should be tried. And

where the tuberculosis is *primary in the peritoneum*, laparotomy is directly indicated and often results in complete cure.

In the primary cases the prognosis is better where the tuberculosis is represented by miliary tubercles of the peritoneum with ascites than in the cases with thick adhesions, without much fluid.

Taking into consideration the fact that in competent hands exploratory laparotomy is a safe procedure in comparison with non-operative treatment, and the further fact that spontaneous recovery without laparotomy occurs only in a small minority of the cases, the author believes that the laparotomy should be done whenever it is possible.—*Archives of Pediatrics*, September, 1902.

EMPHYEMA IN INFANTS AND CHILDREN.

It is not possible in infants and children to differentiate the symptoms of pleurisy with effusions from those of empyema. In most children, before the age of five, the effusion is likely to be purulent. In children empyema follows some acute affection of the lung in 95 per cent. of the cases. Naturally, this affection is most often a pneumonia, though bacteriological examination of the fluid shows that a mixed infection is not infrequently present. The tuberculous forms of empyema are relatively infrequent in childhood. Empyema may follow the acute exanthemata, also typhoid, tonsillitis, appendicitis, sepsis of the newly born, etc. It sometimes happens that the effusion is at first serous, later becoming purulent, without extraneous infection.

In a few cases, not necessarily tuberculous, the effusion is hemorrhagic.

The symptoms are usually masked by those of the causal affection. The temperature is usually elevated; there is more or less cough, pain and dyspnea. Exhausting night-sweats are common. The diagnosis must rest on physical signs and exploratory puncture.

The prognosis in the post-pneumonic form is not bad, except if there be complicating secondary broncho-pneumonia, or where the pneumonia persists. The prognosis of the tuberculous forms rest upon the age of the patient and the extent of the lung involved in the pleuritic affection; but, on the whole, it is better even in this class of case than it is in adult life.—KOPLIK (*Medical News*, September 13, 1902).

CONSTIPATION—ITS TREATMENT WITHOUT DRUGS.

First, *correct all the bad habits.* Nothing can take the place of this injunction. * * * Take time for every meal, or don't eat it. * * *

Bending the body at the middle backward and forward, sidewise, twisting, gyrating, stooping, swinging and thrusting the arms upward, backward, forward, round and round, reaching, striking, pulling and pushing—all these motions are of value. Rapid walking, horseback riding—if the horse is not too easy in gait!—kicking, swinging the legs, squatting and rising rapidly many times repeated. Any motions or exercises that act upon the abdominal muscles, that stimulate the diaphragm, accelerate the breathing function and favour the peristaltic movement of the bowels will aid in banishing the demons and hobgoblins that dance and devastate in the wake of this national if not cosmopolitan malady, constipation.—*The Dietetic and Hygienic Gazette.*

AN IMPROVED METHOD OF PERCUSSION.

The limitations of percussion in thoracic and abdominal disease are quite well understood. In the majority of instances, percussion is carried out by tapping with the fingers of the right hand upon the back of the fingers of the left hand laid flat upon the part. There are certain limitations to percussion when performed in this manner that do not obtain when some substance other than the fingers is brought between the wall of the cavity to be percussed. The fingers may not fit the part accurately. They inevitably cover a considerable surface, and, consequently, the vibrations are conducted over a considerable area. Various substitutes for the finger, made of rubber and celluloid, have been devised, which have for their general purpose the limitation of the area which is to be percussed. The disadvantage of these, as compared with the finger, is that the sense of resistance, which is of such value in diagnosis, is left out.

A method devised by J. Plesch, of Budapest, combines both methods to advantage. He uses the middle finger of the left hand, but instead of laying it flat upon the chest, only the tips of the fingers are brought in contact with the part to be percussed. The finger is bent at a right angle at the second joint and the percussion is made over the first phalanx. In this way the vibrations are limited to a small area, and are accurately brought out; at the same time the vibrations are conducted to a considerable

depth into the tissues because of the limitation of the surface application. More precise data are furnished by this method of percussion than by the usual means. The value of the method has been proven by Plesch, who has confirmed the results by radiosopic examination.—*Medicine*.

In stab wounds of the abdomen in which intestines escape, they should be immediately reduced after careful cleansing with saline solution. If there is any difficulty owing to tightening of the abdominal wall around the gut, the parietal wound should be enlarged. In some cases it is proper to let out the gas with an aspirating needle, after which a stitch should be taken at the site of puncture.—*International Journal of Surgery*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital

WHEN IS ACUTE NEPHRITIS, EXCEPTING THE TUBERCULOUS FORM, PROPERLY THE SUBJECT OF SURGICAL TREATMENT ?

The most important of the diseases here considered is acute nephritis with miliary abscesses. The danger of urogenic infection of the kidney commences as soon as the outflow is in the least obstructed, and after the abscesses have formed in one kidney it is altogether possible that the same may occur in the healthy organ as a consequence of embolism. Thus it may come about, and probably does in most cases, that the two methods of infection combine to account for the condition. Where the transmission is through blood current, it is by far the greater number of cases which originate from the intestinal tract. However, the greater number of slight infections of this nature never lead to abscess formation, and are easily cured by internal treatment, which consists in great part in the drinking of immense quantities of water. The first and

principal symptom of suppurative nephritis is pain in the vicinity of the affected organ. The disease is most frequent in men, because they are more subject to obstruction than are women, and is, in consequence, almost always bilateral. In the lighter forms of the disease the best preventive treatment is free and careful drainage of the bladder. It must be kept constantly empty. Where suppuration has once occurred within the kidney, it is very likely also to affect the tissues immediately surrounding the organ, either by lymphatic transmission or by breaking down of the kidney capsule under influence of the pus. On account of the many blood vessels in the kidney and the tension which this capsule causes, these rapidly lead to general sepsis. The chief danger at first is for the second or healthy kidney. Hence the first indication is to thoroughly drain the diseased organ; but, however, it has been demonstrated that if the kidney is already slightly affected, still the patient may regain perfect health after an operation on the organ which is primarily most diseased. Of course, the exact diagnosis is highly difficult; hence every operation for this infection is primarily in the nature of an exploration. If the diagnosis has been correct, one finds edema of the fatty capsule; the kidney very dark in colour and hard; then the little abscesses shining through the capsule or else felt as circumscribed nodes covered with fibrin; then the organ is split either in the ordinary post-mortem plane or else through the most diseased portion, after which it is good practice to exercise everything which seems bound to undergo softening. A rubber drain is now placed in the pelvis of the organ and the incision stuffed with gauze, the same material being packed around the kidney. By this means the tension is relieved, the circulation resumes its normal course and free exit of pus and urine is allowed. It is, further, good practice to completely remove the fibrous capsule of the organ. If it is found that the greater part of the kidney has undergone pus formation, it is well to completely remove the organ. If then there be obstruction of the bladder by clot formation, it is well to make suprapubic section at once. The principal symptoms for which operation is necessary are local pain and sensitiveness to pressure, these, of course, being reinforced by the usual chemical and microscopical examination. Such an operation as described is especially to be undertaken where a sudden oliguria or anuria occurs in a patient whose general condition is good and who manifests symptoms just detailed above.

The author gives histories of several cases upon which

he has operated with results which must be characterized as brilliant.—LENNANDER (*Mitteilungen aus den Granzgebieten der Medizin und Chirurgie*, Band x, Hft. 1 und 2).—*Interstate Medical Journal*.

THE SURGICAL TREATMENT OF TUBERCULOUS CERVICAL ADENITIS.

J. F. Mitchell (*Bulletin Johns Hopkins Hospital*) says :

1. Tuberculous cervical adenitis is primarily a local disease of very frequent occurrence, more often in young persons ; in itself not extremely serious, and rarely, if ever, proving fatal.

2. It bears, however, a certain definite relation to tuberculosis of the lungs, and serves as the starting-point from which tuberculosis may spread.

3. The tuberculin test, as an aid to diagnosis, is positive and harmless.

4. While recovery may often take place under good hygienic conditions, surgical interference is clearly demanded in most cases.

5. When surgical treatment is resorted to, the operation should be radical in all cases.

6. Recovery may be predicted in 70 or 80 per cent. of cases so treated. Tuberculosis of the lungs, after complete removal of the glands, is comparatively rare.

7. Tuberculosis of the lungs, unless far advanced, is not a contraindication to operation, the removal of the glands apparently exerting a beneficial influence on condition of the lungs.

EXAMINATION OF THE BLOOD IN SUPPURATIVE CASES TREATED SURGICALLY.

Curschmann has pointed out that leucocyte counts afford definite information as to the proper time to interfere in cases of appendicitis. Kuttner and Brunn have verified this statement in 161 cases, and have at the same time tested the value of Ehrlich's reaction, which depends on the presence of glycogen in the white corpuscles. It is necessary in these investigations to guard against various errors, to make two counts a day, to remember the normal variations in children, in adults, during digestion, etc.

Leucocytosis and Ehrlich's reaction have been of value in acute infections, but not in tumours or in inflammation, chronic or specific.

Even in acute infections the results obtained are

demonstrable only where the condition develops rapidly. When the process becomes localized and an abscess is formed the leucocytosis diminishes or disappears; the iodine reaction is less definite.

Thus the leucocyte count can only serve to differentiate between an abscess or a tumour if with a normal temperature one finds at different times an increase in the white cells.

Abscesses uncomplicated by mixed infection never show a leucocytosis.

(1) In appendicitis the results obtained by Küttner accord closely with those obtained by Curschmann and Cabot. When, at the onset of appendicitis, uncomplicated by pneumonia, the number of leucocytes increases rapidly and remains high, after the first few days one can state definitely the existence of pus, and one should operate at once; the temperature matters little. In the same way one meets with a high leucocyte count in those cases which clinically give the impression of a general peritonitis, but in which some parts of the peritoneum will be found healthy. In cases of this kind Ehrlich's reaction is, perhaps, of more value than leucocyte count, because it disappears more quickly than the leucocytosis if, after interference, the patient goes on to recovery.

(2) What is true in appendicitis is true also in rapidly spreading phlegmonous suppuration. Here a leucocytosis indicates a rapidly-extending process. On the other hand, a rapid diminution in number of the white corpuscles justifies one in making a favourable prognosis, even when clinically the condition appears very grave. But in cases of rapidly fatal general septicemia, as in general suppurative peritonitis, leucocyte count fails.

(3) The examination of the blood is also important after operations in aiding prognosis. If all goes well and there is no infection, the leucocytes progressively diminish. Occasionally it is best after an operation to make the first dressing as late as possible, for example, after a resection of the knee. In cases of this kind, even though the temperature may remain at 40° C. for the first few days, the leucocytes may drop to normal and healing take place by first intention.—Küttner. *Abstract from Revue de Chirurgie, Maryland Med. Jour.*

DULNESS IN APPENDICITIS.

H. T. Miller, Springfield, O., believes that in the symptom dulness, we have an infallible means of differentiating in appendicitis between cases that are operative and non-operative. When we have a case of appendicitis without the formation of an inflammatory exudate we can afford to wait, but with the occurrence of dulness it is jeopardizing the life of the patient to defer operative interference. In an acute attack of appendicitis with dulness, persisting from twenty-four to forty-eight hours, and after the bowels have moved, one should operate, and the chances are that pus will be found. In a recurrent attack with dulness, even if the temperature and pulse are normal and the patient is able to be up and around, one should operate, and one will most likely find an indurated appendix with adhesions around the appendix and caecum. In the former case an immediate operation is the only recourse, in the latter the surgeon will by operating anticipate an outbreak with pus formation. In acute attacks of appendicitis without dulness, the case should be treated conservatively; should dulness make its appearance and remain, surgical intervention should be at once advised. Pain in the region of the appendix does not always mean appendicitis, but localized dulness with the associated symptoms of appendicitis always does. While it is true that in every case of appendicitis with dulness we do not find pus, in all of these cases the conditions are such that no mistake is made by surgical interference.—*N. Y. Med. Record.*

**UNDER WHAT CIRCUMSTANCES IS IT ADVISABLE TO
REMOVE THE VERMIFORM APPENDIX WHEN
OPENED FOR OTHER REASONS.**

Howard A. Kelly, Baltimore, having written to eighty well-known American surgeons upon this subject received replies from seventy-four. His questions were as follows :

1. When the abdomen is opened for other causes, and the perfectly normal appendix is easily accessible, is it your rule to remove it ?

2. When the appendix is slightly adherent to neighbouring structures, as peritoneum, ovarian or fibroid tumours, do you then remove it ?

His conclusions are embodied in the following :

1. The appendix should always be examined and its

condition noted whenever the abdominal cavity is opened for any reason, provided no additional risk is involved.

2. The opinion of the majority of surgeons in this country is against the removal of a perfectly healthy appendix, forty-four to twenty-six being the proportion shown in my investigation.

3. The opinion of a large majority of surgeons is in favour of removing an appendix which is even slightly adherent to other structures, sixty to seven being the proportion shown in my investigation.

4. The fact that the appendix is normal in appearance does not prove that it contains no fecal concretions, for I have found them in a number of instances. Their presence is sufficient reason for the removal of an apparently healthy appendix.

5. After removal of the right ovary the stump should always be covered with peritoneum in order to prevent the risk of adhesion to the appendix. A long and free appendix should invariably be removed.—*Jour. A. M. A., St. Louis Med. Rev.*

APPENDICITIS FROM A PHYSICIAN'S STANDPOINT.

James Tyson, Philadelphia, after relating a number of cases in which operation did not seem indicated, says:

It is such experiences as these which have brought me to the conclusion that every case of appendicitis whose diagnosis is thoroughly established should be operated on, always, if possible, in the interval between attacks. Of the diagnosis, however, we should be reasonably certain. In view of the occasional difficulties of diagnosis, it may happen now and then that a normal appendix is removed; but I have come to the conclusion, too, that it is better to have a few normal appendices removed than that one which ought to have come out should remain and cause death of its owner. The appendix is not an organ of which we need be especially proud. It is useless and exceedingly vulnerable and without powers of resistance when attacked.—*Jour. A. M. A.*

THE PRIMARY TREATMENT OF RAILWAY INJURIES.

J. N. Baker, Montgomery, Ala., lays especial stress on the importance of recognizing shock, which he states may be defined as a state of general depression, reflexly

produced by damage done the peripheral nerves and with symptoms referable, in the main, to vasomotor paralysis. A distinction should be made between surgical shock and collapse, restricting the latter to cases in which serious loss of blood is the causative factor ; for it is the exception rather than the rule in railway accidents to have serious primary hemorrhage. The symptoms of shock are given as a depressed and enfeebled circulation, a lowering of body temperature, a pinched and expressionless countenance, pupils varying, though usually dilated ; mental apathy, a cold and sweaty skin, and in the graver forms a relaxation of the anal-sphincter. Should the head be involved, instead of mental apathy we may have profound unconsciousness or mental excitability. Treatment should be directed toward arousing the nervous system, both centrally and peripherally. Centrally this may be done by the administration of the usual agents, strychnine, nitroglycerin, whisky, morphine or atrophine, etc., all of which should be given hypodermically. Morphine, combined with atrophine, is usually the drug of most service. Peripherally, stimulation is induced by heat, the free use of blankets and hot water bags and by having the temperature of the room more than comfortably warm. In addition to these measures, saline infusion is of the greatest service. After a brief report of a few cases, to illustrate the measures to be adopted in various forms of injury, the following points are especially emphasized: The importance of an understanding and an appreciation of the nervous phenomena of shock. The value of the saline infusion, intravenously administered, for the relief of this condition in its graver forms. The importance of prompt surgical interference immediately upon the establishment of reaction. The importance of a plantar flap where the foot is involved, or of a palmar flap where the hand is involved. Never uselessly sacrifice tissue ; never sacrifice a joint ; and always strive to leave the patient with a smooth, painless, non-contracted, non-cicatrizated stump.—*N. Y. Med. Rev., St. Louis Med. Rev.*

A NEW PROTECTIVE DRESSING.

Karl Springer describes a new protective dressing, which is intended especially for use in plastic operations, skin-grafting, etc., where it is important to keep the dressing from adhering to the surface of the wound. The various materials, such as rubber tissue, oiled silk, oiled gauze, etc., which are in general use for this purpose are

open to the objection that they stand sterilization by heat but once, after which they must be preserved in some antiseptic solution, which often impairs their strength or pliability, and always requires washing off in sterile water to remove before use. The substance which the author employs as a substitute is paraffin of a melting point of 45° to 47° C. If a small piece of this is thrown on the surface of boiling water it is first melted, and then, on cooling, forms a thin, floating pellicle, which may be handled with forceps and cut to the proper shape with scissors. The technique of its practical application is simple. A flat vessel provided with a cover is partially filled with water and brought to a boiling point. A piece of paraffin is then thrown in and the boiling continued for ten minutes. The vessel is then placed in another dish of cold water, causing the paraffin to harden as a thin pellicle on the surface. As soon as this occurs the vessel is placed in water at a little above body temperature, which keeps pellicle soft and pliable. Holes for drainage may then be punctured through it with a sterile needle, and after cutting to shape it is lifted with forceps and applied to the wound with the water side down. The thickness may easily be controlled as experience dictates by the size of the lump of paraffin used.—*Centralblatt f. Chir. St. Louis. Med. Rev.*

Jottings.

Dr. Bartholow states that the loss of voice from fatigue or simple laryngitis is relieved by small doses of nitric acid well diluted and given every two hours.

A blister applied to a felon in its early stages will often prevent its further progress. The blister need not be more than one and a quarter inches square, but should be kept on perhaps eighteen hours, when dark serous accumulation can be let out. Paint the locality with comp. tinct. of iodine every hour or two until the pain ceases or inflammation is removed. The application of fresh grated Indian turnip moistened with turpentine is most highly extolled.—*Med. Summary.*

Abram Meyer (*Med. Record*, March 8, 1902), reports a

recovery from diabetic coma following the administration of several twenty-grain doses of urotropin. He explains its beneficial effect on the theory, that being a chemical combination of ammonia and formaldehyde, in the presence of acid in the blood it is split into its component parts, the ammonia serving to neutralize the acid in the blood.

The best remedy for bleeding at the nose is in the vigorous motion of the jaws, as if in the act of chewing. In the case of a child, a wad of paper should be inserted, to chew it hard. It is the motion of the jaws that stops the flow of blood. The remedy is so very simple that many will feel inclined to laugh at it, but it has never been known to fail in a single instance, even in the severest cases.

Brieger has reported excellent results from the treatment of sciatica by means of hot water baths or packs and massage.

Dumesnil says that the most unsightly scars can be removed or greatly lessened by means of electrolysis.

Derby obtains better results in the treatment of progressive atrophy of the optic nerve from the use of subcutaneous injections of strychnin in the temples, in increasing doses. He begins with grain 1-25, and increases this dose daily by 1-100 of a grain, until constitutional effects are noticed, usually about the tenth day. The drug is then discontinued for about ten days and then repeated.

For the removal of vegetations from the external genitals salicylic acid is an excellent remedy. Half a drachm should be dissolved in an ounce of acetic acid and applied to parts with a camel's hair brush.

Hare says that the atonic stomach of drunkards is much improved by a pill made up as follows :

Oleoresinae capsici.....	m x.
Olei caryophylli.....	m x.
Hydrargyri chloridi mitis.....	gr. xx.
Aloes socotrinae.....	gr. xl.
Ft. pil, xx. S.: One t. i. d.	

In ingrowing toenail, with granulations, a piece of twisted absorbent cotton soaked in a strong alum solution and inserted under the edge of the nail is a valuable remedy.

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Editorial.

A LESSON TO THE WORLD.

To us it seems an extraordinary matter that to-day we find even a few, who, being possessed of average intelligence and fair reasoning powers, yet enroll themselves among those who delight to style themselves "Anti-Vaccinationists." In our opinion, if there is a fact which is beyond the pale of doubt, it is that vaccination and revaccination has saved countless lives from smallpox. Twenty years ago vaccination was almost totally neglected in the parishes of the Province of Quebec and very largely neglected and imperfectly performed in its cities. Of the latter fact the writer is perfectly cognizant, for he was then, and for many years before, a public vaccinator in the City of Montreal. At a meeting of the Health Committee about that time, he expressed the opinion after having examined the arms of many thousands among the French Canadian population, that 90 per cent. of that nationality were not protected, the marks found not being "good vaccine marks." That he was correct is proved by the terrible visitation which Montreal received from smallpox in 1885, when the epidemic was very largely among French Canadians. We, frequently, at

our clinic in the Montreal General Hospital, with a view of enforcing on students our strong views on the benefits of vaccination, relate what we have written above ; at the same time, to prove our assertion, have kept a record of the nationality of those who are badly marked from the disease. We have repeatedly recorded one hundred French Canadians under this head, without a single English speaking person. Occasionally, of course, they are found, but they are rare, and their safety has been due to proper vaccination. Thanks, however, to the intelligence and the zeal of our French Canadian physicians during the past two decades, their leading spirits being Dr. Laberge, Montreal Health Officer, Dr. E. P. Lachapelle, president, and Dr. Pelletier, secretary of the Provincial Board of Health. All this is changed. Vaccination is to-day perhaps as well performed among French Canadians as it is among the English speaking portion of our population. Since 1885 there have been, on a large scale, many instances where smallpox has been vaccinated out of existence. An illustration of this has occurred within the last three or four years in Porto Rico. Major Ames, brigade surgeon United States Army, has published in the *Pacific Medical Journal*, for September last, a most valuable report on vaccination in Porto Rico, of which he was director. He summarizes the work and its results in the following words: "In October, 1898, smallpox was endemic in Porto Rico ; in December it was epidemic ; in January, 1899, it had "honey-combed" the Island ; by February there were over 3,000 recent cases and the disease was spreading at a gallop.

"In February, systematic compulsory vaccination, carefully and scientifically conducted and recorded, was begun simultaneously and with pretty equal efficiency in all parts of the Island. It was vigorously prosecuted *for four months only*, till 1st July, when 860,000 vaccinations had been made in a population of about 960,000. Of these 87½ per cent. were successful. The work then ceased, because completed ; the disease had, practically, disappeared ; the fuel for it to feed

upon had been consumed by the "head-fire" of vaccination. In the two and a half years that have since passed, instead of the former annual average death-rate of 621, the mortality from smallpox has been but two per annum in a population of nearly a million. Can any *honest*, intelligent person doubt in face of these indisputable and easily verified facts, *what* it was that in *four* short months drove smallpox from its wide and long-time reign on the Island, and has since kept it out? *Vaccination alone did it, and will do it effectively wherever compulsory legislation, properly enforced, secures its benefits to all!*"

URETER-CATHETERISM: ITS PURPOSE AND PRACTICABILITY.

At the meeting of the Mississippi Valley Medical Association, at Kansas city, October 15, 1902, Dr. Bransford Lewis, of St. Louis, read a paper under the above title, and presented his perfected model of catheterising cystoscope for male and female, which permits of catheterization of both ureters at the same sitting because of the new double-barrel arrangement of the ureter tubes. After the reading of the paper, a demonstration of double ureter-catheterism was made by Dr. Lewis before a number of members of the Association, the time required for getting both catheters into the ureters, after the introduction of the cystoscope into the bladder, being three or four seconds for each ureter, local (cocaine) anesthesia was used; and very little discomfort was complained of by the patient during the procedure.

The essayist claimed for ureter-catheterism great advantages in respect to both diagnosis and treatment, and under these two divisions presented a schedule of the purpose of the procedure.

A number of cases were reported, in which the clinical aspects of the subject appeared. Case I. referred to a patient who had been advised to undergo an operation for

removal of three stones that were supposed to be lodged in the ureter, the diagnosis being based on an X-ray photograph. Ureter catheterism showed the ureter to be absolutely void of any foreign material, and drainage gave perfectly clear and healthy urine from that side. Case II. was one of persistent cystitis and infection of the urinary tract that was rebellious to various treatments applied for several months, and only responded satisfactorily after regular periodic irrigations of the infected left kidney-pelvis had been carried out. These removed all foci of infection and restored the tract to health. It was mentioned that two other cases of urinary infections with prolonged history had behaved similarly and had proved equally as amenable to the boric acid irrigations of the kidney-pelvis. Cases of unilateral and of bilateral renal tuberculosis, in both male and female subjects, were mentioned, the definite diagnosis being made in each case without serious disturbance to the patients and without subsequent increase of irrigation, etc. On the contrary, there was improvement in each case, following the washings with antiseptics that were also given. The question as to whether the air used for distending the bladder had any beneficial effects had come to Dr. Lewis' mind. Several cases were mentioned in which there had been so much bleeding from the urinary tract that successful cystoscopy or ureter catheterism with the older, lens, instruments by which the manipulations would have to be made through clear fluid in the bladder, would manifestly have been impossible; the fluid would have become clouded with blood so quickly that no view of the bladder or of the ureter openings could have been obtained. But this did not deter the writer from accomplishing both objects, as the blood flowed along the walls of the bladder, collecting in small pool at the fundus, out of the way of the manipulations, the patient being in the elevated pelvic posture on his back. Catheterism of both ureters had been accomplished in each case of this kind in which it had been undertaken; and a means of appropriate medication, with-

out operation, had been supplied, also. The bearing of this method on pyo-nephrosis and peri-renal abscess, with respect to both diagnosis and treatment, was shown by illustrative cases. A description of the instrument and the technique of its use was given. General anesthesia had been abandoned and had been satisfactorily replaced by cocaine anesthesia, best secured by means of the writer's urethral tablet depositor and cocaine tablets made by Searle and Hereth Co. The ureter-cystoscope was being made by the Surgical Appliance Mfg. Co., Rochester, N. Y. It was mentioned that a table for the purpose of expediting and facilitating the procedure was being developed under the author's supervision by the Willbrant Surgical Mfg. Co., of St. Louis. This table was intended to be adapted to other genito-urinary operative and office work also.

**UNIVERSITY OF BISHOP'S COLLEGE
FACULTY OF MEDICINE.**

The session of this Faculty opened early last month, and we are glad to learn that it promises to be the most successful in its history—nearly, if not quite, thirty Freshmen having so far registered. An unusually large number of Second, Third and Fourth Year men have also registered, many being new men who have come from distant schools on account of the reputation of the Faculty for its practical teaching. This session will be one of nine months, the first in its history. We are informed that in view of concluding work before the "dog days" arrive, the courses will open next fall, early in September.

The Annual Dinner of the graduates and undergraduates in medicine and dentistry of Bishop's took place at the Place Viger Hotel, on the 6th November; one hundred and eleven sat down, among the guests being the Hon. J. Israel Tarte. The speeches were much above the average of such occasions. We hope in our next issue to give a more extended report.

Book Reviews.

A Text-Book of Pathology and Pathological Anatomy.—By Dr. Hans Schmaus, Professor in the Pathological Institute at Munich. Translated from the sixth German edition by A. E. Thayer, M.D., Instructor in Pathology, and edited, with additions, by James Ewing, M.D., Professor of Pathology in Cornell University Medical College, New York. In one octavo volume of 597 pages, with 351 illustrations, including 35 coloured inset plates. Cloth, \$4.00, *net*. Lea Brothers & Co., Publishers, Philadelphia and New York.

Professor Schmaus is a Pathologist of high authority in his own country. Dr. Ewing has won reputation in this, by his work on the blood and his studies on inflammation. Messrs. Lea are known everywhere for the excellence of their publications. When these three forces were known to be working together in one direction, toward the production of a text-book on Pathology, an unusually good result was to have been expected. The book has appeared; and on account of this high hope it demands careful examination and particular notice.

The publishers have left nothing to be desired. The book as it leaves their hands is substantial, handsome and even dainty; the illustrations are fresh, clear and artistic. In a word, the make-up of the work is admirable, pleasing to the hand and eye.

The best text-book is one that is most useful, a statement not so obvious as it would appear. This usefulness depends on a large number of qualities. It must contain the common information upon a subject, brought together for common use; it must be full and accurate. The present book is full to repletion, it is accurate in its statement of fact. But there is something more. The information must be well classified, and easily accessible. In the present case it is not well classified, it is not easily accessible, and English-speaking students have not the industry of their German confrères to dig into the text for isolated facts and correlate them in their own minds. One example will serve. The introduction is burdened with an account of the signs of death, full and excellent, but no one would think of looking for it there. It is quite true this foreign material is found in the German, but there is nothing profane in a free handling of the original, for the comfort of the student is the supreme law in the making of text-books. That is the editor's business.

There is still something more. A text-book does not imply originality on the part of the maker, editor or translator; it does imply good sense in selection, in leaving out as well as putting in. There must be a correct and nice use of words, a logical sequence of sentences, in short, it must have style. The text-books that endure are those that have this quality, in addition to those already

named. They are the great books—Erichson's Surgery, Quain's Anatomy, Osler's Medicine. No German professional book ever has style; at least, it is not apparent to the Gentile mind. It is the business of the translator and editor to supply it, unless the book is to remain merely a translation, and so stated in the outset.

Dr. Thayer, the translator, writes English excellently well,—for a German; but, apparently, he had not much assistance from the editor, for Dr. Ewing, in his preface, considers the text has been rendered into "clear English." The rendering is neither clear nor correct. It is doubtful if there is a page which will not yield proof of this, and there are nearly six hundred pages in the book. The meaning of such a sentence as the following, on page 18: "these cellular elements, the very bricks of the edifice, are the actual carriers of life functions," is not clear, unless the cellular elements of the blood be thought of as bricks and the life functions carried by them as a roof to the edifice. In the same paragraph three subjects are named, and the last is referred to as "which latter." Upon the same page a "purpose" is referred to first as a "pathway" and again as a "foundation."

There is a straining after scientific exactness of definition common also in American books not confessedly translations, which destroys all fluidity and freedom of expression. The terms, "marantic edema" "universal and inclusive view," "expression of life," "concepts," "spontaneous injury," "signification of tuberculosis," "suggillation" are not essentially more correct than simpler expressions, and they give to the text a foreign sound, look and feeling.

Again, whole sentences, excellent in themselves, are interjected into passages where they only serve as obstructions. There is a good example of this on page 212 where the following occurs: "Baumgarten and Walz do not admit the existence of such alexins. *Natural immunity means that an animal is not a favourable medium for the bacteria invading it.* They rest their argument on the fact," etc.

The free use of "latter" and "former," "first" and "last" "the same," "the previous" is obstructive to the flow of thought. Adjectives are continually used in a substantival sense as "colloid," "amyloid." The sentence: "the arterio-sclerotic kidney is distinguished from atrophy with stasis by the over-filled veins of the latter, even when very much decreased in size," is not "clear" in its meaning nor agreeable in its form. When one comes upon such terms as "regressive," and finds upon reflection that they are strictly justifiable, he is inclined to think that terms like "arrosion," on page 485, are also so, but that is an unwarrantable inference.

If it be considered that these are mere subtleties, one may mention more obvious departures from normal writing, in sentences without subjects, in a lack of agreement between nouns and their verbs, in a wrong use of adverbial expressions and prepositions. One or two random examples of each will serve: "Occurs in the

blood in septic diseases," page 217; "inflammation is but a pathological exaltation of processes which *serve*," page 105; "*there appear* to be grains," page 66; "there *are* found a number," page 239; "islands of tissue which *is* little affected or in fatty degeneration," page 425; "the cause of the cyanotic induration is the distention of the veins and the hyperplasia of the stroma which *leads to*," page 423; "similar as," page 216. These are little matters compared with the use of "and which." There is a trace of humour in the expression "the majority of the protozoa found (in carcinomata) are degenerative products of cells."

The merits as well as the defects of the original have been faithfully reproduced. There is often a variation in definition which is sure to confuse, as in the case of fatty infiltration and fatty degeneration, or rather a definition is made absolutely and later is qualified to the point of destruction. Very little attempt is made even in matters of controversy to state to compare and decide between opposing views. In the consideration of tumours the statement is made: "We know now that true epithelium, and hence its tumours may develop from the middle layer"; it may be so, but one would like to have some evidence of it. The handling of what is called inflammation, the real test of a writer on pathology, is not clever, and the result is disorderly and uninteresting.

Most of these things concern the work of the editor and translator; the fact still remains that the original is of great value to German students, and that a translation would be of great value to American students—if it were done by other hands.

Professor Schmaus' work is of so high an authority, the labour of rendering it more accessible to the American student has been so great, the enterprise of the publisher has been so marked, that the result challenges criticism, and it is permissible to speak thus freely of it here.

A. M.

Butler's Materia Medica. A Text-Book of Materia Medica, Therapeutics, and Pharmacology. By George F. Butler, Ph. G., M.D., Professor of Materia Medica and of Clinical Medicine, College of Physicians and Surgeons, Chicago. Fourth Edition, revised and enlarged. Octavo. 896 pages, illustrated. W. B. Saunders & Co., Philadelphia and London, 1902. Cloth, \$4.00 net.

This is essentially a student's book. The fourth and revised edition now before me is a marked advance on the first three editions. It has, practically, been rewritten, with a resulting improvement in the method of presentation of its subject matter. The portion dealing with Materia Medica as ordinarily understood is full and concise. The section on serum therapy (which by the way is placed under the "Alteratives," instead of the "Specific Medications," as one would expect) is somewhat sketchy. Under Organotherapy, seven pages suffice to dismiss a most important

subject, and personally I should prefer the word "secretions" in the opening sentence: "The striking fact that various *excretions* "and tissues of the organism, when administered under certain "conditions, possess a peculiar therapeutic value is now well "ascertained."

The chapter on prescriptions embrace a sort of condensed Latin grammar. This part of it is (perhaps unconsciously) a caustic commentary on the standing of American medical students or standard of the matriculation of American Medical Colleges. This "how-to-learn-Latin-at-a-glance" method seems strangely out of place in a volume intended for medical students and for whom the standard of preliminary requirements should be so sufficiently high to obviate the necessity for such elementary notes, with its corollary confession of insufficient educational foundation. The best chapter in the book is written by Martin H. Fisher, M.D., Associate in Physiology in the University of Chicago, on "The Relation of Physical Chemistry to Pharmacology and Therapeutics," although but eight pages are devoted to it, and that it would be more at home in a "quiz-compend" than a text-book—altogether the volume lacks the extended physiological experimental work of words—the bio-chemical work of a Cushing, the practical therapeutical applications of a Shoemaker, and has been written for the United States, and its pharmacopæa. The paper is excellent and of dull finish, the type clear, and the binding above reproach.

R. W.

Lindsay and Blakiston's Visiting List for 1893.—P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

This is the fifty-second year of this annual, and no better visiting list is published; we have used it for over forty years, and have found that it answers perfectly every need. In addition to the numerous other valuable features for which this little work is noted we specially wish to draw our readers' attention to two new features—namely, the pages on incompatibility, chemic, pharmacæutic and therapeutic; also the page on the immediate treatment of poisoning. We believe these additions will enhance considerably the value of this Physicians' Visiting List, as an ever-handly reference guide for the medical practitioner.

F. W. C.

A Text-Book on Diseases of Infancy and Childhood.—

For the use of Students and Practitioners. By Henry Koplik, M.D., Attending Pediatricist to Mt. Sinai Hospital, New York; ex-President of American Pediatric Society, etc. Octavo, 675 pages, 169 engravings and 30 plates in colours and monochrome. Cloth, \$5.00, net; leather, \$6.00, net. Lea Brothers & Co., Philadelphia, 1902.

This is a new work on pediatrics. The author aims at giving, as well as his own views, those of the best writers on this subject

both in Europe and America. In this he has succeeded well, and the arrangement of the work is excellent, giving the author's name in brackets when quoted, and at the end of each chapter a list is given of the leading authorities referred to in the chapter. There is also an author's index. By this arrangement the views of an author on any particular subject may be easily referred to. The work, as a whole, deals with about all the diseases of infancy and childhood, but not minutely. The main features of the disease are given, and the author keeps the clinical aspects well to the front. Thus the work is not voluminous, which makes it better adapted for the use of general practitioners and students. Special attention is given to methods of examination and physical diagnosis. The work is well illustrated and the publishers have shown their usual skill and good workmanship in the general make-up of the book.

I. C. S.

Bacteriologic Technique. A Laboratory Guide for the Medical and Dental Student, by Dr. J. W. H. Eyre, Lecturer on Bacteriology, Charing Cross Hospital Medical School, London. W. B. Saunders & Co., Canadian agents: J. A. Carveth & Co., Toronto. Price, \$2.50.

No guide could be more useful than this one. It is complete, systematic and reliable. It is the outcome of the experience of a man who has wrought with his own hands and knows the difficult places in the course. Every method and operation employed in the laboratory is clearly described and could be performed by a student of average skill without any further instruction. The work is what it purports to be—a guide through the laboratory, not a text-book, not even a manual of bacteriology. It is intended for workers, not for readers.

The illustrations really do illustrate; the descriptions are clear and adequate, and given in good style. The range of work covered is very large and includes almost everything that can be done in a laboratory of bacteriology.

A. M.

The Medical News Visiting List for 1903.—Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60 patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal Grain Leather, \$1.25. Thumb-letter Index, 25 cents extra. Lea Brothers & Co., Publishers, Philadelphia and New York.

A visiting list is an indispensable convenience for the active practitioner. Its carefully adapted blanks enable him at once to note clinical details of every day work, as well as charges and receipts, and to unburden his memory of that which can better be

carried on paper. It also furnishes him with a legal record necessary for the collection of delinquent bills. Among the most convenient of the many publications of this nature is the *Medical News Visiting List*. Its blank pages are arranged to classify and record memoranda and engagements of every description occurring in the practice of the physician, surgeon or obstetrician. The work opens with printed data of the most useful sort, including an alphabetical Table of Diseases with Approved Remedies, a Table of Doses, Sections on Examinations of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, a Diagnostic Table of Eruptive Fevers, and a full page plate showing at a glance the incisions for ligation of the various arteries, an invaluable guide in such emergencies.

It is printed on fine, tough paper, suitable for pen or pencil, and durably and handsomely bound in the size of a wallet for the pocket. When desired a Thumb-letter Index is furnished, which is an economizer of time. We have used this little book in the past, and can honestly testify to having had perfect satisfaction, it being quite a *Multum in Parvo*.

R. C.

Physical Diagnosis.—Diseases of the Thoracic and Abdominal Organs. By Egbert Lefevre, M.D. Lea Brothers & Co., publishers, Philadelphia, 1902.

This is one of the most up-to-date and concise works on this important subject.

It is useful alike to student and practitioner. The work reflects credit on the author and the publishers. The subject matter of the book is excellent, and the printing, paper and engravings could not be improved upon.

The work is divided into five parts.

Part I. takes up the important subject of Regional Anatomy in a very thorough and clear manner.

Part II. deals with the methods of diagnosis of diseases of the Respiratory System. The principal diseases of the chest are discussed, and the important points in the diagnosis.

Part III. goes fully into the methods of diagnosing cardiac diseases.

Part IV.—In this section the principal elements in the detection of disease in the abdominal organs are dwelt upon. The principal diseases are mentioned with their special diagnostic points.

The book ends with Part V., in which there is an excellent dissertation on X-Ray work. Its technique and the uses to which it is applied in medicine from a diagnostic point of view. The plates in this section are particularly good.

We commend the book to all those interested in this department of medicine.

W. G. S.

CANADA MEDICAL RECORD

DECEMBER, 1902.

Original Communications.

RETROSPECT OF LARYNGOLOGY.

Under charge of GEORGE T. ROSS, M.D., D.C.L., Lecturer on Laryngology and Rhinology, Medical Faculty University of Bishop's College.

SURGICAL TREATMENT OF PURULENT ETHMOIDITIS.

One of the most complete and most exhaustive studies ever published on this subject is given by Guisez, in the August number of "Annales de l'Oreille, de Larynx and du Nez" (Paris). He carefully defines all the relations which the cells bear to neighbouring sinuses, and vascular connections. He shows the advantages and disadvantages of different methods of treatment, quoting many European as well as American authors for illustration, and finishes by giving the technique of cases operated on with results of treatment.

LOCAL APPLICATION OF HEROIN HYDROCHLORIDE.

Rosenberg (Berlin) discusses the local application of heroin hydrochloride in the larynx and the objections to its topical use which some writers have made. He says, if the quantity used in this way is not greater than the dose usually prescribed internally, no harm can follow, and this quantity is generally more than is required in the larynx for beneficial effect to follow. The author uses a 1 to 40 watery solution, 0.2 cm containing 0.005 heroin, corresponding to the customary dose. Being absorbed as readily by the larynx and trachea as by the stomach, the effect is twofold, viz: cough allaying and analgesic, by reducing both central and peripheral irritability. If this solution be sprayed on the posterior laryngeal wall, the most sensitive cough locality in the larynx, in a case of tuberculosis of this organ, the relief is often

good for the entire night, being in this way of great service to cases where the exhausting night cough is very weakening to the patient. In the dysphagia of these patients heroin is useful. It should be continued for some time, as the effect seems cumulative, the pains being only relieved for a few hours at first, but later remaining absent the entire day. Altogether, it is regarded as one more efficient remedy in cases of tubercular laryngitis as well as those of irritable larynx from other causes.

CONSTITUTIONAL MANIFESTATIONS DUE TO INFECTIOUS PROCESSES IN THE ADENOID TISSUE OF CHILDREN.

Kyle (Phila.) shows that this source of disease in children is often overlooked. Modern thought inclines to the belief that many constitutional diseases owe their origin to microbic development in the lymphoid tissues of the upper respiratory tract. Many physicians heretofore opposed removal of adenoids unless they occluded the tube or interfered with nasal respiration, but experience has shown that even a small mass of lymphoid tissue may act as an infective centre setting up recurrent attacks of fever until removed. Otitis media is well known to be due sometimes to this cause.

AURAL BOUGIES.

Richards calls attention to the usefulness of these, especially in children who are attacked with earache. They are made the size of a quill, and half an inch long. Any medication can be incorporated, but particularly carbolic acid, opium, cocaine, atropine, etc., in suitable doses.

DISTURBANCE OF MUSCULAR ACTION OF NOSE BY PARAFFIN INJECTION.

Alter calls attention to this accident in a case of his, where a natural nasal breather was changed into a mouth breather by the paraffin operation, to correct saddle nose. It was found the injected paraffin obstructed free muscular contraction and relaxation so that the alae nasi were collapsed during inspiration. To obviate this accident it is suggested that an assistant should place a thumb in each nostril, making counter pressure on the outside with the index fingers until the nose had been moulded into the desired shape, when the muscles affected would not be encroached upon.

THE USE OF SUPRARENAL GLAND IN DISEASES OF THE NOSE AND THROAT.

Kyle notes that occasionally disastrous results were obtained from a comparatively diluted solution of adrenalin chloride, possibly attributable to changes in the drug brought about by acid secretions. For operative work he employs solutions of one to a thousand or two thousand; for the relief of local congestion one to ten thousand. In the latter case a pledget of cotton is soaked and left in the nostril for ten minutes. He has also noticed a marked secondary congestion after its use. Congestion has even been made worse after the application of this drug. He regards it as a more powerful vaso-constrictor than cocaine, and does not recommend its use in operations, as it is likely to be followed by severe hemorrhage. He has also seen sloughing follow its use, and has had an unfavorable experience with it in hay fever.

SIMPLE METHOD OF CULTIVATING DIPHTHERIA BACILLI (BAYNE).

Take an egg and boil until hard. With sterilized forceps break gently into the air sack and peel off the shell and membrane immediately beneath it, leaving enough of the same to protect the culture. Now make a swab from the throat and gently smear on the surface of the egg under that part of the shell which is left. Then take an ordinary cup and pass through a flame very rapidly several times to sterilize. Place the egg in the cup with the broken end down and leave by a stove twelve hours. By this method is gotten an almost pure culture of diphtheria bacillus in from eight to twelve hours, this organism growing more rapidly than others usually present.

MALARIA ON THE WEST COAST OF AFRICA.

By C. A. FORTIN, M.D.C.M. (BISHOP'S 1897), SURGEON R.
M.S. ORISSA, H. M. TRANSPORT NO. 18.

It has been my privilege, during the last year, to make several voyages to the west coast of Africa, and as little is known of this rapidly growing part of Africa, perhaps a few personal observations as to the health question may prove

interesting. Of late years, quite a "gold boom" has been in operation. Naturally, as in all other "gold booms," there has been a great rush to these parts of men of all stations of life, and many have left their bones there, as a monument to the unhealthy state of the country. For years the west coast has been called the "white man's grave," and to some extent the cognomen is a correct one, but, on careful investigation, one finds that the climate is not so bad as it is made out to be.

As the country is being developed, an increasing band of traders, miners, planters, etc., are populating the various settlements. This noticeable increase in the European population has called the attention of the scientific medical world to the great mortality due to the ravages of the malarial bacillus.

Recent investigations have led to a great following of the "mosquito theory," and every possible effort is being made to exterminate the pest.

All possible praise is due to those scientific men who have worked so patiently and endured so many hardships to prove that the mosquito is an important factor in the causation of malaria.

There can be no possible doubt as to the correctness of the "mosquito theory," but in this, as in many other important theories, too much stress is laid upon one point. The mosquito may be, and undoubtedly is, an important factor, but it is not the *only* factor in the etiology of malaria.

The climate itself, the diet, the isolation and associations of the resident on the west coast, are in my humble opinion the predominant factors.

To better understand the effect of these factors, let me briefly explain what they are:

I. *The climate* is very peculiar. The day during the dry season can be roughly divided into four stages:

(a). 6 a.m. to 11 a.m.—Here you have a clear healthy atmosphere with the temperature gradually increasing from 60° F. to 90° F.

(b). 11 *a.m.* to 4 *p.m.*.—This is the time of the day when the sun's rays beat down most heavily. The temperature gradually increases to about 110° F., reaching its height at about 1 p.m. The atmosphere is stifling; there is not a breath of air, and even in the shade one experiences a horrible sense of a heavy weight pressing upon the chest.

Gradually the temperature begins to fall, and at 4 p.m. we find the thermometer registering about 85° F.

(c) 4 *p.m.* to 12 *p.m.*.—The air gradually becomes cooler, gentle breezes spring up, and by degrees a sense of well-being begins to steal over the body. As darkness comes on, however, a peculiar, moist swampy kind of a scent seems to pervade the atmosphere.

Then comes the mosquito, sand-fly and other irritating insects that the flesh is heir to, and, unless carefully surrounded with nettings, one's life becomes a burden.

(d) 12 *p.m.* to 6 *a.m.*.—Here we find the state of the weather most undecided. Generally at about 2 to 3 a.m., a cold breeze springs up and the temperature may fall as low as 40° F. This cold spell is often the cause of very serious results for the following reason: When a man retires, say at 11 or 12 p.m., he requires a minimum of clothing. This generally consists of a pajama suit and a sheet. With the loss of consciousness, the sheet is often cast off, and when the cold breeze comes it has full play upon an unprotected body with open pores, and hence causes a chill.

In a large majority of cases the exposed part is either the abdomen or chest, and I have seen several cases of pneumonia and dysentery all attributable to this cause.

At sunrise a thick fog or mist arises from the numerous swamps and lagoons and hangs over the land until the more powerful rays of the rising sun dissipate it.

These are, roughly speaking, the four different stages of the climatic changes during the 24 hours.

The country as a whole, along the coast is mostly swampy and low-lying.

Long lagoons or inland seas traverse the coast for

miles, opening occasionally into the sea. These to a slight extent feel the effect of the tides, but in a large number of cases, the water in them is stagnant, the bed muddy and lined on either side with thick jungle and assume the general characteristics of swamps.

This stagnant water has the effect of rendering the atmosphere very humid, and when the hot rays of the sun beat down upon it, the vapour given off can be likened to that experienced whilst taking a steam bath.

This leads on to the question of *Diet*. Necessarily, fresh meat will not keep in this kind of temperature.

I have seen the meat of a freshly killed bullock become tainted and covered with a greenish mould within four hours after dressing!

This being the case, canned meats have to be resorted to. With all due respect to the various canning manufactories, it is a well-known fact that canned meats lose a great deal of their virtue in the process of canning.

Resource is made, therefore, to the native chicken and duck, both very diminutive affairs. A well-known coast saying is—that a man gets such a surfeit of chicken on the west coast that he is unable to look a hen in the face on his return to England. Fish, of course, can be obtained in abundance, and forms a staple dish.

Not only is there a scarcity of meat foods, but there is also a scarcity of vegetables. Strange as it may seem, no vegetable will grow on this coast, except in a very few places. Hence, such commodities as potatoes, onions, etc., have to be imported.

The substitute used is rice, the food of the native.

To simplify matters, I will give a brief *résumé* of the bill of fare of an ordinary coaster, not, of course, taking into consideration the fare of those who have the good fortune to be stationed in seaport towns:—

Native fowl, goat, bullock or sheep, canned meats and fresh fish.

Rice, yams and Indian corn.

Fruits in fair abundance, i.e., bananas, pines, cocoanuts,

limes, oranges, etc. As can be seen, the coaster has not very much of a variety to choose from.

The excessive heat has the effect of causing loss of appetite and taste, and the surrounding unsanitary state of the native villages and the peculiar smell of the natives themselves, all assist the heat in its deleterious effects.

This loss of appetite, etc., leads on naturally to one of the most important questions to be debated, i.e., the resort to the taking of stimulants.

The drink question has been mentioned by a good many writers, who have reported upon the health question of the west coast. Not many months ago a well-known investigator raised a furore of condemnation amongst past and present coasters, by saying that "a majority of the deaths were due to whiskey fever." Whilst this was rather a sweeping statement to make, still it contained more truth than the coasters would like to admit. The favourite appetizer is the "Gin Cocktail," This is a decoction made from gin, bitters, egg, sugar and lime juice, well beaten up with a swizzle stick. It is a very good and harmless drink when taken in moderation, but how many are moderate?

III. The *Isolation Question* should now be considered. The coaster is generally situated in a district, with only the companionship of the native. In some cases there are one or two other factories in the place, and the white population may reach the number of three or four. There is, therefore, no amusement, and, after the strangeness of the situation wears away, a sense of complete isolation from the outside world begins to steal over the white coaster. The climate is very depressing; he begins to brood after the business cares of the day are over. His mind naturally reverts to the unhealthy state of the country, and he wonders if he will survive to reach home again.

Finally, to buoy up his spirits he will take a cocktail and perchance repeat the dose several times before the meal. Should friends visit him, it is worse, for then the usual allowance is bound to be increased.

This goes on from day to day ; therefore, can anybody gainsay the fact that this habit alone will not tend in time to undermine the system ? Not that I advocate total abstinence, far from it, for in that part of the world a certain amount of stimulation is required for the debilitated system. If greater attempts were made to moderate the amount of alcholic stimulants taken, I feel confident that the death-rate would rapidly decrease.

Thus we have, then, very briefly considered three important factors which play a most important part in the etiology of malaria.

From personal observations, I would advise the following preventatives for malaria :

I. Better sanitation in the towns and villages.

II. Traders to supply their clerks with better food and ice machines (of which there are very many good ones on the market).

III. A shorter service on the coast. The Government only demand a 12 months' stay on the coast, which is quite sufficient.

IV. More medical men to be sent out, and when a clerk by force of circumstances is situated at some distance from medical advice, he should be supplied with a specially prepared medicine chest and explained the use of the various drugs.

V. Each resident to take at least three grains of quinine twice a week, and no more.

These suggestions are only a few of many that could be given, but these are essential.

With care and attention to the ordinary rules of general health, I do not see why life at the west coast of Africa should not be as healthy as life in England itself. The high death-rate on the coast is more noticeable, naturally, on account of the smallness of the population. If the mortality rate were considered pro rata to population, I fancy that of England would take the lead.

Another great and very important evil which affects

the coaster is the prevalence of syphilis, gonorrhœa and other genital troubles, too numerous to mention.

Veneral disease is as often the cause of the breakdown of the coaster as malaria, and taken together are, of course, often attended by fatal results.

But this complaint cannot be laid down to the effects of the climate, but must be considered as a legacy left to the coast by the early *white* settlers.

The great idea of the coaster is to get acclimatized. I hardly think this is possible, for the natives themselves suffer from malaria. Strange as it may seem, those who suffer more severely are those who belong to the civilized and educated class. Those men and women assume European habits and vices, and hence the climate seems to have more effect on them than upon the crude article. These few brief remarks on west coast life may be of interest to a few of your readers and may cause some interest to be raised in this long-forgotten part of our British domain. In conclusion I may say that, during the last few years, many of our young Canadian doctors have made voyages down to this coast, and from all sides I have heard nothing but praise for their skill and particular knowledge of the various cases they have had under their care. By small successes like these, people in various parts of the world will soon begin to realize that even from *frozen Canada* can knowledge be disseminated.

C. A. FORTIN, M.D., C.M., Bishop's, L.R.C.P.
and S. Ed., L.F.P. and S., Glasgow, Surgeon
H.M. Transport "Orissa." No. 18,
Bermuda, W. I., December 6, 1902.

**ANNUAL DINNER OF THE GRADUATES AND UNDER-
GRADUATES OF THE FACULTIES OF MEDICINE
AND DENTISTRY, UNIVERSITY OF
BISHOP'S COLLEGE.**

Bishop's College Medical graduates and Medical students were the first in Montreal to break away from the beer and cheese stage, when the Freshman treated their Seniors, and thus ingratiated themselves into their favour.

At the Windsor Hotel, many years ago, they asserted their right to sit down and enjoy a good dinner with a feast of reason and a flow of soul thrown in. Year after year it has been continued, and other Medical Schools, Bishop's senior in age, have taken their place in the line. Nearly all have been successful functions—a few may not have been so successful as was wished, but this was the exception. But of all the dinners bearing Bishop's name, the one which took place on the 6th November last, at the Place Viger Hotel, at which Medical and Dental Students attended, bears the palm. One hundred and eleven guests sat down, and some eminent men were there, among them the Hon. J. Israel Tarte, whose bright and witty speech showed that loss of office had not dampened him in the least. Mr. James Francum, 1903, occupied the chair, having the Dean, Dr. F. W. Campbell on his right and Mr. Tarte on his left. After dinner the usual toast list was gone through with.

Since the affiliation of the Dental College, of the Province of Quebec, with Bishop's, the Medicals have had the assistance of its Dental Graduates and Students at these annual functions. The number thus present at this function was large, and the flags of the two departments decorated the Dining Hall.

To the toast of the Dean and Professors, Dr. W. H. Drummond, Professor of Medical Jurisprudence, responded as follows:—

Since the inception of this Faculty, the relations between teachers and students have always been of the most cordial and friendly character, and to-day sees us more loyal each to the other than ever before in the history of the University.

It is true that among Medical Faculties, our children, comparatively speaking, have not been very numerous, but those who have been born to us are good children and have never yet brought the blush of shame to the face of the old mother, and, though far scattered, many of them may be, yet we feel that to-night they are with us in heart and spirit, rejoicing that the traditions of Bishop's are still as they have ever been, spotless and unsullied.

We welcome to our halls of learning all who come to us in the right spirit, and we are glad to train in our Universities, and return well equipped to their own countries, those who hail from other lands beyond the Can-

adian borders; we greet them as brothers and children of one common mother, for that is the true University spirit. Often when reading the calendars of our Canadian Colleges, have I been deeply pained by noticing the large numbers of Canadian born young men who have been obliged to forsake, in most cases, forever, the land of their birth and affinity to acquire abroad the competence denied them at home. It is very mete to recite proudly, as we often do, the magnificent successes of an Osler or a Casey Wood, but why have we not been able to keep these men at home in their own country? Have we such abundance of the great in medicine that we can spare such giants? This continual sacrifice of our best and brightest to help in building up the institutions of a rival people has always rankled in my Canadian breast. Only a few months ago you probably read in the Press, that of some thirty graduates in science of a well-known Canadian School, all with the exception of one or two passed over to the United States, and, when attending last spring the convocation of an Ontario University, I learned that the chief prize winners had already received appointments among our cousins of the Great Republic; in fact, the American College representative who selected the flower of the graduating class was actually there on the spot to personally escort his captives to their future homes on the other side of the line, much after the manner of days gone by, when the New England horse trader used to pick and choose our Canadian ponies, till to-day there is hardly a specimen of the breed left in the Province of Quebec.

I do not for a moment blame our ambitious young countrymen for wishing to better themselves in the world; for self-preservation is a law in itself, but it is galling to think that the bright Canadian College-bred lad, who to-night sings "The Maple Leaf Forever," may in a week or two expand his lungs with "The Star Spangled Banner." However, I believe a better day has dawned for us in Canada. Students of the times, as Medical students ought to be, must realize that we are now in an era of extraordinary prosperity, and that the country which to-day possesses a population of six millions will in ten years number over ten millions. The opening up of our immense waterways, the multiplying of railway lines, the manufacturing of the natural products with which the

Almighty has so amply endowed us, the stimulation under proper laws of our native industries, will have the effect of creating employment for every graduate of our Canadian Universities, and I am sanguine enough to believe that the time is not far distant when the condition of the past will be reversed, and American physicians will gravitate towards this country as naturally as many Canadians at the present day gravitate towards the United States.

When I consider the practically limitless possibilities of Canada, surely it is reasonable for me to predict that very soon this country will be able to levy an export duty on our boys and girls, and the measure of that duty will be the ability of Canada to provide for her children employment and remuneration sufficient to enable those sons and daughters to live out their natural lives on their own soil.

Sink provincialism, the warring and clashing of creeds, avoid secret societies, which are the bane of modern college life, do everything to develop our national resources, learn how the strength of our neighbours has been acquired, and profit by that knowledge. Remember, Resemble, Persevere, and under God you need have no fear for the future.

To the toast of "Our Guests," Dr. W. Grant Stewart responded, as follows:—

Mr. Chairman and Gentlemen:

The onerous but pleasant duty of proposing the toast to our guests devolves upon me. I would the task had fallen on more worthy shoulders. After-dinner speakers like poets are born, not made, but I am sure they will accept the will for the deed. In the far west, better known as the wild and woolly west, stands a little church, unpretentious in appearance, claiming no architectural charms, plain without, and if possible more plain within. The seats few and far between, because the worshippers are like the seats, few in number. The aesthetic part of the service has not been neglected, for away in one corner stands an ancient organ, in keeping with the surroundings of the church. Above, hung upon the bare wall, is a placard, on which is printed in large bold letters, the following polite request:

"Please don't shoot the organist; he is doing his best." The moral of the story I leave to my hearers.

During the past summer, as you all know, London was a mecca for all tourists, and every one who could, bent his steps thitherward, I among the number.

I reached London the evening before the operation on the King.

What a wonderful sight it presented with its teeming crowds! Here were to be seen all sorts and conditions of men. The ubiquitous American, the sturdy colonial, the canny Scot, the true-hearted Irishman, the bareheaded, bowlegged, barefooted Figi Islander, the pigtailed Chinamen, princes from far off India with wealth beyond the dreams of avarice, civilians and soldiers, princes and paupers, a motley crowd indeed full of eager expectation. For were they not here to witness one of the greatest pageants of ancient and modern times?

When the news came out that there was to be no coronation, that the King had been operated on, and that instead of witnessing the Coronation it might be a funeral, the gloom and sorrow and disappointment was great indeed. The old adage was never more forcibly demonstrated, that "man proposes, God disposes."

But, as the reports became more reassuring day by day, the tension gave way, and joy followed sorrow, and laughter followed tears.

London witnessed at this time many stirring events; one of the most interesting to us from Canada was the Review of the Colonial troops.

As I stood on Constitution Hill and witnessed the march past of 2,000 troops from all the colonies, a thrill of patriotism and pride welled through me; a feeling which only those who have experienced can appreciate. An object lesson of the unity and strength of a great empire, an empire on which the sun never sets.

And as I on the succeeding day stood on the Mall and witnessed the Queen, beautiful, majestic, every inch a queen as she drove past, accompanied by the Royal family, and followed by Lord Roberts and 2,000 Indian troops in their gorgeous and picturesque uniforms, their stately military bearing, my enthusiasm again reached the bursting point, and I was proud that I was the son of an Empire that was able to rule by love such a great country as India, and that these same soldiers were happy to do honour to their King, and if need be to lay down their lives in the service of the Empire and be reckoned amongst the soldiers of the King.

But of all the stirring events I saw, none perhaps impressed me like the great banquet held in the Hotel Cecil on Dominion Day, to drink health and continued prosperity to Canada, the gem of the colonies.

Never in my life has it been my good fortune to sit down amongst such a distinguished company. Dukes, Lords, Earls, Generals, Admirals, Captains, Politicians, Authors, Artists, Lawyers, Doctors, Bishops, men great in position, great in wealth, great in science and intellect,

Lord Strachona full of years and honour presided.

There were many great speeches, but without exception the grandest after-dinner speech I ever listened to was delivered by one of the guests of the evening, Sir Wilfrid Laurier, the premier of Canada, the silver-tongued orator. In an address full of flowing sentences, rounded periods, elegant diction and beauty of thought, he held his audience spellbound.

He described this Canada of ours in flowing terms, and like Nicodemus of old he invited our English guests to come and see.

Come in the leafy month of June, when the country is in beautiful verdure clad; stay and see the fields of golden grain in the far west. Stay a little longer and view the glorious tints of autumn.

Stay on and see Canada in winter, the ground clad in snow-white garb, the rivers and lakes bound in ice, the keen frosty air reverberating with the merry jingle of the sleigh-bells, and the shouts of the merry skater and snowshoer, and when the day has waned see the night, the blue vault of heaven lit up with myriads of stars and the moon shedding a pale light over the scene; turning the darkness of night into the brightness almost of noonday.

And, as Agrippa exclaimed as he listened to the eloquence of Paul, "almost thou persuadest me to be a Christian," so every Englishman said in his inmost soul, "almost thou persuadest me to be a Canadian."

Then followed such a burst of cheering and enthusiasm as I had never before heard.

Such, indeed, was the speech of a man, born an after-dinner speaker, and what would I not give to have such a gift, but this is a digression.

I am not here as an emissary of Sir Wilfrid's, nor has the Government subsidized me to gain votes for the next

election. Neither do I ask you to follow the proverbial man from Cook's.

I am sure I voice the sentiments of the Faculty, and give expression to the feelings of the students of Bishop's College when I bid our guests welcome.

Coel mille faithe, a hundred thousand times welcome.

If there is one thing more than another for which Bishop's is noted, it is her hospitality.

Our guests are our friends, and as Sir John Lubbock beautifully puts it in his "Pleasures of Life," "if we choose our friends for what they are, and not for what they have, and if we deserve so great a blessing, then are they always with us, preserved in absence and even after death in the amber of memory."

We are glad to have our guests with us; we want them to hear of our success, to know of our aspirations; we want them to see the Faculty, to meet our genial Dean, whom we all love and admire for his kindness of heart and his sound judgment and wise counsels.

"And still we gaze and still our wonder grows ;
That one small head should carry all he knows."

Our wish is that he may be long spared to occupy his present position.

We want our guests to meet our students, of whom we are proud and before whom we are striving to lay down high ideals of practice.

I think we can say we are rivals of no Institution. We are co-workers in the earnest field of practical and scientific medicine.

Not all of us can claim Bishop's as our Alma Mater. Many of us are proud to claim old McGill as our kind good mother. And, although we teach in Bishop's, we have not forgotten the old love; we could not if we would, and we would not if we could.

We, all of us, are delighted at her ever-growing success. And I am quite sure she in her turn is glad to see her sons carrying on the good work she so ably began.

To our confrères in the profession, we extend a hearty welcome; a fellow feeling makes us wondrous kind; we all belong to a profession whose creed is wide as humanity itself. The portals of the temple of Esculapius are shut to no creed, to no nationality; of all the professions there is none more liberal, and perhaps there is no more beautiful type of man than the general practitioner of high purpose and lofty ideals. No more beautiful compendium of

what the profession has done, what it is doing, and what it aims to do is there than that scholarly address of Osler's—Chauvinism in Medicine—the most practical sermon I have ever heard. It converted me so to speak, for my sympathies are much widened ever since I heard it. This address I would like to see put into the hands of every one of the men graduating from our school.

There is one of our guests whom I have always looked upon as an example of the courtly physician. We, to-day, lack much of the grace and true culture of the older generation of physicians. This is an age of rush in every thing, and we do not take time to cultivate the aesthetic side of our nature. There is one who exhibits the *suaviter in modo* and *fortiter in re* in a marked degree. He is an old friend of Bishop's, a tried friend, and after all there is nothing better than the old friends. I think it is Shakespeare who says:—

“Old books, old wines,

“Old friends, old times.”

I refer to my—to our distinguished friend, Sir Wm. Hingston, and I am sure we feel honoured at having him with us to-night.

And now, I turn to our clerical friends. I have always had a warm spot for the clergy. A son of the manse myself, it has been as it were bred in the bone.

Religion and medicine should ever go hand in hand, and it is mete that we and the clergy should be good friends; whether it be the pious curé who faces the dangers of a stormy winter's night to give consolation to the dying and a word of friendly solace to the living, or the earnest minister, who, though poor in filthy lucre, is rich in grace and truth, we respect them all; they deserve our co-operation and esteem.

I do not know the learned principal of Bishop's College well enough to know whether he practices, but I do know he can preach, for we heard him deliver one of the finest after-dinner speeches that we have ever heard at the Faculty dinners. If he practices as well as he preaches, which I am sure he does, then he is a good man indeed. We are pleased to see him amongst us to-night, and I am quite sure he will be much pleased with what he sees and hears to-night, as no one at this board has more the welfare of the Faculty at heart than he; we feel he is the right man in the right place.

At the Annual Dinner of the British Medical Association in Manchester, there was a toast to the Clergy. The proposer told an amusing story about a man who frequently inbibed, and one day, when partly under the influence, he met the parish priest, and he unburdened his mind. He said that he had lived in the world for 65 years and he was still unable to make up his mind as to which was right—a good Catholic or a good Protestant. The old priest immediately replied: "Faith and sure you won't be in the nixt world sixty-foive minutes before you will know which is roight."

We are all much pleased to have our worthy Mayor with us to-night; we congratulate him on the able way in which he is conducting the civic chair. He is with us to-night, not only as representative of the city, but as an enthusiastic worker of the Western Hospital, and we know he is deeply interested in the welfare and success of Bishop's College.

While he is here, we would take the opportunity of bringing to his attention the question of the Civic Hospital, one of the most crying needs of our great city. If the members of the Council were all like-minded with him this question would soon be settled.

It is a great pity that all social and religious differences could not be set aside in a matter like this, which appeals to the common good of all.

Now, gentlemen, drink with me to the health of our guests. Let us "welcome the coming, speed the parting guest."

Mr. W. W. Kelly, from Jamaica, a fourth year student of Bishop's Faculty of Medicine, proposed the toast of "Sister Universities," by the following speech:—

Mr. President and Gentlemen:—

When the Committee selected me for the task of proposing this most important toast of "Sister Universities," I assure you I felt deeply honoured. On thinking over a possible reason for their selection, I came to the conclusion that it was because I am an Irishman, and as such supposed to be endowed with the gift of the gab. But, gentlemen, there are exceptions to every rule, and I have the misfortune to be one of those exceptions.

However, like every one who has a speech to make and who has had lots of notice thereof, I immediately set about hunting for ideas, for something to say, but my search was fruitless, and I vainly sought for inspiration.

I was at a loss to understand this for some time until I made a startling discovery, which fully explained the futility of my efforts.

It was this, that such a toast at such a dinner needed no talking on my part, for *it spoke for itself!*

And is this not so gentlemen? I firmly believe yes, for such a toast, without any additionally flowery eloquence, to my mind speaks in no uncertain voice of all that stands for friendship, good fellowship and unity. Yes, unity, that magic word which is to play such an important part, not so much in these rolling, rollicking, students days, but in the great future to which we all look forward.

We students, like the general run of the Medical profession, are, I think, too much inclined to develop into a lamentable spirit of Chauvinism, against which Dr. Wm. Osler (whom Dr. Grant Stewart has so eloquently quoted to-night), in his annual address at the recent meeting of the Canadian Medical Association, so strongly warned the profession.

With us, this Chauvinism takes the form of imagining that our University is the only one which ought to exist, and that though, by some unfortunate mistake, other institutions similar to our own are to be found, yet ours is the only one competent to turn out good men.

Gentlemen, pride in one's own University, pride in its professors, pride in the graduates which our College turns out, is only right and just, and we should be less than human, nay, wanting in a just and proper *esprit de corps*, if we failed to cultivate and cherish such sentiments as these; but surely there is a wider sentiment, aye, and a wider yet which should animate us! I should like to divide this relationship into three circles.

In the first I would place the spirit of which I have already spoken, viz., that personal pride in our Alma Mater, that anxiety for her success, pride in the advantages which she offers, and in the successes of our fellow graduates. The next is a wider one, and one into which all of us here to-night may enter—it is the pride we should feel as Canadians and Canadian graduates in the medical schools of this broad Dominion, pride in the men which these schools turn out; and the history of this Continent, at least, shews us that we have just cause for pride.

But, gentlemen, there is a wider circle yet, and one that absolutely puts all Chauvinism and provincialism in the background ; I refer to the common heritage we all possess, irrespective of school or country, of language, of customs, the great heritage of a common cult, a common profession, whose history is universal, whose literature is common to us all, whose members are governed by one common Code of ethics, which knows no special religion and no politics in the performance of its duty.

The time will soon come when we shall all have to take our places in the firing line and fill the gaps which the ravages of death have left in the ranks of those physicians whose lives stand for integrity and loyalty to the cause. It is then that we shall realize the full meaning of the term unity, when all distinction as to school and country shall be placed aside, not so much in these great University centres, but in the "far-off" to which 90 per cent. of us must go.

Then we shall have no University to guide and protect us, no professor to whom we can go in a case of questionable diagnosis, but when we must stand shoulder to shoulder, the one helping the other, guided and animated by what, gentlemen?—by the membership of a common cult, a cult, the result of whose teachings the evidences of whose example and the spirit of whose laws have made the music of the world.

We have with us to-night representatives from the Universities of Laval, Trinity, McGill, Queen's and Toronto. In verity are we in good company. It would have been a pleasure to me to have spent some time in particularizing the many almost personal ties which compel us to delight in honouring them to-night, but the hour is late and you are all anxious to get to bed. I should have liked, for instance, to have spoken of Queen's, enlarging upon the tie that unites us in the person of Dr. J. V. Anglin, one of her distinguished sons.

Then of Laval, that great French Canadian University with whom our relations have always been so felicitous ; of Trinity, in truth our sister University representing in the Province of Ontario, as we do in the Province of Québec, the interests of the Church of England in Canada, but like ourselves open to all irrespective of creed or colour,—to Jew and Gentile, Chinamen and even Irishmen, if they

will conform to their stand, and, of course, pay their fees. And then we have McGill; why, gentlemen, I could speak all night of McGill, flesh of whose womb we are and bone of whose bone. Yes, flesh of whose womb, and our worthy Dean and Sir Wm. Hingston and Dr. Perrigo, and one or two others who were present at that accouchement are with us to-night. Judging from the writings of Dr. Campbell, the delivery was not an entirely normal one, no simple left occipito anterior, but a case of anesthesia and the forceps. But, thanks to such able obstetricians, we were not still-born!!

And, finally, we have Toronto. When I speak of Toronto University I am reminded of the man who, when asked if he could speak German, said no, but that he had slept in the room with one. Well, we don't belong to 'Varsity, but we take dinner with her representative every year, and that is the next best thing.

As I said before, I should have been happy to have dilated upon these pleasant themes, but the time will not permit it.

It, therefore, only remains for me to extend to you on behalf of my fellow students and the Faculty a hearty welcome, to express our pleasure at this meeting, and our regret that such gatherings are not more frequent.

Unfortunately, owing to the paucity of our numbers and to the fact of being isolated from our sister Faculties, we are unable to meet you all in that friendly strife of sport which does so much towards cementing the friendship of sister Colleges, but the large Freshmen class of this year leads us to believe that the time is not far distant when we will, as a Faculty, be able to carry the purple and white into your intercollegiate contests.

In the meantime, we would ask you to believe the sincerity of our welcome, and charge you each to carry back to your respective Universities the right good hand of fellowship which we extend to you to-night, and we would ask you to express to them our sincerest wishes for their future success, and the pleasure we feel in the anticipation of another jovial meeting next year.

Gentlemen, I give you "The Sister Universities."

Selected Articles.

CAN WE BY MODERN METHODS ANTICIPATE IMPENDING ATTACKS OF PUERPERAL ECLAMPSIA?*

By J. L. ROTHROCK, M. D., ST. PAUL.

There is perhaps no complication in obstetrical practice which is the occasion of so much anxiety as puerperal eclampsia.

Insidious in its onset, presenting no marked nor characteristic premonitory symptoms, too often the busy practitioner, who, it must be confessed, seldom pays much attention to his expectant patient until called to her in labour, is taken by surprise, and finds himself wholly unprepared to meet such a grave emergency.

Eclampsia is variously estimated to occur in 1 in 150 to 1 in 400 cases of labour. It is more common in large cities than in small towns and rural districts. According to statistics it is more common in Russia than other portions of Europe.

Race too seems to have some influence. My own observation among Russian Jews in American cities leads me to believe that it is of less common occurrence among them than Americans.

Eclampsia is said to be unknown among American Indians, as also may be said of other savage tribes, it being a disease exclusively confined to civilized peoples.

In the entire field of medicine there is probably no disease which has been the subject of so much investigation in recent years as puerperal eclampsia, and as yet we are in absolute ignorance of its cause.

We shall pass over the various theories which have been proposed from time to time and which are no longer regarded as tenable.

At present two theories demand special consideration. One that eclamptic attacks are uremic and occur in patients with pre-existing nephritis. Those who contest this theory assert that eclampsia may occur in patients whose kidneys show no evidence of pre-existing nephritis. On the other hand it is a common clinical observation, that patients with marked nephritis if they become pregnant rarely are the subject of eclampsia. In further proof that eclampsia is not a pure uremia, certain char-

*Read before the 34th annual meeting of the Minnesota State Medical Society, Minneapolis, June 18, 1902.

acteristic changes in the liver and blood, which, as we shall see later, are almost constantly present in eclampsia, are wanting in ordinary cases of uremia. The theory of uremia presupposes a pre-existing nephritis as the primary condition while the pathologic-anatomic findings in cases of eclampsia make it reasonably certain that the kidney lesions are in general secondary.

The theory of uremia has at present but few supporters especially when generally applied to cases of eclampsia, but there are some who still believe it applicable to certain cases.

The other theory and the one which to-day finds most adherents is that of auto-intoxication, which signifies that during pregnancy under certain conditions poisons are elaborated and may by accumulation, circulating in the blood, reach such a degree of concentration as to produce the characteristic eclamptic seizures by their action on the nerve centres.

The recent experiments of Blumberg and Zuntz (1) have shown that during pregnancy a considerable increase in the excitability of the nerve centres takes place, rendering them peculiarly responsive to any form of stimulus, which may in part explain the unusual tendency to eclamptic attacks at this time.

The theory of auto-intoxication had its inception in the teachings of Bouchard some years ago.

Bouchard had determined that the urine in health was extremely poisonous to lower animals when injected into the circulation.

Laulanie and Chambrelent (2) conducted a series of experiments in eclamptic patients and found that the urine was much less poisonous than of normal pregnant women.

They also conducted experiments to determine the relative toxicity of the blood serum of eclamptic women and found that the blood serum of such women was far more toxic than in health. They further determined by their experiments that the degree of toxicity of the blood serum of eclamptics was in direct proportion to the diminished toxicity of the urine. They, therefore, interpreted these findings as proof of the accumulation of poisons in the blood of eclamptics, and a corresponding diminution of elimination of the poisons by the kidneys. These experiments have in the main been confirmed by Ludwig and Savor (3), while Volhard's (4) experiments gave results directly antagonistic.

Recently Schumacher's (5) has thoroughly gone over the ground in an exhaustive series of experiments, and

concludes that both the blood serum and the urine of the normal as well as the eclamptic patient while poisonous are constantly changing, being subject to wide variations in the degree of their toxicity, and that it is by no means certain that the toxic agent, which produces results on experimental animals, is the same which causes eclampsia. The nature of the poison has given rise to much speculation. Early investigators believed it to be ammonium carbonate, the result of a splitting up of urea in the blood. Others have advanced the theory that the poison was a retained constituent of the urine, kreatin or kreatinin. Masin (6), by an elaborate series of experiments, attempted to show that it was carbonic acid, a product of intermediary metabolism, while Poehl attributed the eclamptic seizures to leucomain poisoning, basing his conclusions on the increase of leucomains in the urine of eclamptics.

Recently, Albert (7) has advanced the theory that the poison has a bacterial origin, from a latent infectious endometritis existing during pregnancy. Most of the supporters of the auto-intoxication theory regard the poison as the product of intermediary metabolism of the liver, while others (Fehling) look upon the fetus as being the source of the poison. While each of these theories has arguments in its favour, neither the nature of the poison nor its source are known. The pathologic anatomic findings in patients dead of eclampsia furnish perhaps the strongest proof of the chemotoxic theory. Schmorl (8), who has made an exhaustive examination of the bodies in 73 patients dead of eclampsia found changes in the kidneys in all but one, consisting of cloudy swelling, fatty degeneration and desquamation of the renal epithelium, with frequently but not constantly epithelial necrosis. In addition, thrombi were found in the glomeruli and in the small veins and arteries. The liver also was quite constantly involved, presenting in 71 of 73 cases examined hemorrhagic and anemic necrosis and in the two cases in which these changes were not found, there were present fresh thrombi in the portal vein. Similar changes were found in the brain and lungs, and in the heart fatty and parenchymatous degeneration was common. Schmorl interprets these changes in the different organs as complicated necrotic processes secondary to the thromboses.

The recent experiments of Kohlman (9), and Dienst (10), have shown that there is an increase of fibrin in the blood of an eclamptic.

Volhard, who has confirmed these experiments, attributes this rather to an increase in the fibrin ferment

than an actual increase of the fibrin in the blood, and that this explains the multiple thromboses which are so constantly present in the organs of those dead of eclampsia. Having thus briefly stated the more recent views on the nature and *étiology* of eclampsia, let us consider what means we have at our disposal to determine that an attack of eclampsia is approaching.

The discovery of albuminuria in a large proportion of cases of eclampsia early called attention to the importance of urinalysis in pregnant women. Albuminuria is almost constant in eclampsia, if not before, certainly during the attack. Olshausen, from a series of 200 cases of eclampsia occurring in his own clinic and a like number from the clinic of Gusserow, found albuminuria present in 98 per cent. of the cases. Zweifel in a series of 129 cases never failed to find albumin in the urine. Its almost constant presence renders it a sign of considerable importance, a danger signal which should not be passed unheeded. In recent years there has been a tendency to attach less importance to the presence of albumin in the urine of pregnant women, from the clinical observation that many patients with albuminuria go through labour with no eclamptic manifestations. The significance of albuminuria in the light of the recent investigations of Schmorl is of vast importance as indicating either very serious renal changes of a character which are constantly present in eclampsia or chronic nephritis. On the other hand, from our present knowledge it is evident that while the search for albumin in the urine is a very important procedure in all cases, it does not give us sufficient information of the patient's condition. For example, we may have very marked renal insufficiency before the appearance of albumin, while in the presence of the most pronounced albuminuria the eliminative power of the kidney may be perfectly maintained. It is to the urine that we must still look for signs of threatening eclampsia, since it has been pretty definitely determined that the eliminative power of the kidney bears some relation to the probability of eclamptic seizures.

Recently we have added to our hitherto known methods of determining the eliminate activity of the kidney, a new one based on the molecular concentration of the urine as ascertained by determining its freezing point. This method, which was first applied to the blood by Richter and Roth (11), and later to the urine by Koranyi (12), and Lindemann (13), has been found a valuable aid in determining the functioning power of the kidneys. Schroeder (14) has recently made application of this

method for the determination of renal activity in pregnant women and from a series of 111 cases examined, he arrives at the following conclusion:

In chronic interstitial nephritis during pregnancy the molecular concentration of the urine is very low, in labour it falls enormously, and in the puerperium it again ascends.

In many cases of nephritis of pregnancy before labour the urine maintains a fairly good degree of concentration and only shortly before or during labour does it fall and again rise in the puerperium. According to Koranyi a beginning rise in the molecular concentration is a favourable prognostic sign. Should an eclamptic attack occur, the molecular concentration of the urine at once sinks very low. Schroeder concludes from these experiments that the lowering of the molecular concentration of the urine may be accepted as indicating renal insufficiency which may be followed by eclampsia during labour or in the puerperium.

In these experiments Schroeder found that the amount of albumin present bears no relation to the molecular concentration of the urine, and that frequently in the absence of albuminuria the determination of the freezing point showed almost absolute renal insufficiency.

Schroeder also conducted experiments for the determination of the freezing point of the blood, and in two cases of eclampsia with low molecular concentration of the urine, there was an enormously high pathological concentration of the blood.

He also conducted a series of experiments for the determination of the degree of blood pressure in pregnant women, and found, that while it is slightly increased just before and during labour, its only value is in differentiating cases of chronic interstitial nephritis, in which the blood pressure is invariably greatly increased.

Very closely related to the determination of the freezing point is the specific gravity of the urine, which Schumacher regards as one of the most important indices of renal sufficiency. A careful examination of Schroeder's tables, however, shows in certain cases a wide variation between the molecular concentration as estimated by determination of the freezing point and the specific gravity, though in many cases there does seem to be a close relation.

For several years I have insisted upon the importance of the quantitative estimation of the urea in the urine of the pregnant women, as forming an index to the degree of renal sufficiency and during that time I have repeatedly

made the observation that the quantity of urea eliminated bears absolutely no relation to the degree of albuminuria. Frequently, in very highly albuminous urine, the quantity of urea will be quite up to normal, while urine entirely free from albumin may show the presence of very little urea.

In all cases in which the urea was diminished the specific gravity was reduced, but the relative proportions were not maintained. In cases of renal insufficiency the quantity of urea eliminated at different times varies greatly, so that it is absolutely necessary to estimate from a specimen taken from a twenty-four hours' collection.

Very frequently it has been possible to predict impending trouble, which sooner or later was confirmed by the appearance of albumin in the urine and in one case under my observation an attack of eclampsia followed. It is true, as has been argued of the value of this method, that many patients in whom in the latter weeks of pregnancy a marked diminution of the elimination of urea takes place, pass through labour without eclampsia, without even so much as dietetic treatment, but we never know how narrowly such patients escape. Among other methods of determining the renal sufficiency which have been proposed may be mentioned the phloridzin test, which, so far as I am aware, has never been applied to pregnant women. Recently, Olivier (15) conducted a series of experiments for the determination of renal sufficiency by the administration of methylene blue. In five cases of eclampsia the elimination was defective in all but one. In this patient the elimination was perfectly regular, but the symptoms were far more severe and it terminated fatally. Olivier concludes that renal or hepatic insufficiency is not inevitably necessary to the production of auto-intoxication, but that with an over-production of toxins, in spite of a normal elimination, the accumulation necessary for the production of eclampsia may take place.

In order that any of these tests may have clinical value, they must form a part of routine practice. It is highly essential that the urine of pregnant women be examined frequently during the latter months of pregnancy. During the latter weeks of pregnancy weekly examinations should be made, or even more frequently should a suspicious specimen be received. I am satisfied that if such examinations were made in all cases as suggested, only in the most exceptional instances would we fail to anticipate threatened eclampsia. The more weighty argument in favour of routine examinations of the urine in all cases is that with the early recogni-

tion of the first sign of renal insufficiency, the patient may be placed on prophylactic treatment, and the attack, if not absolutely averted, may be so modified that the patient may be safely carried through it. Furthermore, being in anticipation of an attack, prompt and active treatment could at once be instituted and the convulsions be brought under control, for all authorities agree that with each succeeding convulsion the prognosis becomes more grave.

BIBLIOGRAPHY.

1. Archiv. f. Gyn. Bd. 65 H. 3.
 2. Annales de Gynecol. 1890 P. 253.
 3. Monatsschrift f. Geb. u. Gyn. Bd. 1.
 4. Monatsschrift f. Geb. u. Gyn. Bd. 5.
 5. Beitrage Zur Geb. u. Gyn. Bd. 5. H. 2
 6. Centralblatt f. Gyn. 1895, No. 42.
 7. Archiv. F. Gyn. Bd. 66. H. 2.
 8. Archiv. f. Gyn. Bd. 65. H. 2.
 9. Centralblatt f. Gyn. 1897. S. 341.
 10. Archiv. F. Gyn. Bd. 65. H. 2.
 11. Berliner Klin. Woch. July 24, 1899.
 12. Berliner Klin. Woch. Sept. 4, 1899.
 13. Deutsch Archiv. f. Klin. Med. Sept. 1899.
 14. Beitrage Zur. Geb. u. Gyn. (Fritsch Festschrift) 1902.
 15. Reference, Jour. Amer. Ass. June 21, 1902, P. 1628.
- St. Paul's Med. Journal.*

HOW TO MAKE CONFINEMENT EASY.

(By M. Shellenberg, M. D., Philadelphia.

The medical practitioner should look into the future in treating the girls who are growing up, and correct errors in the method of living, dress and exercise. He must warn the mother against allowing her daughter to indulge in habits which injure the health and especially anything likely to cause weakness or disease in the pelvis. The prevention of pelvic congestion by the use of warm undergarments, especially during menstruation, the forbiddance of heavy lifting or long standing, which tend to cause uterine displacements; the avoidance of constipation, a fruitful source of trouble in producing congestion, stagnation and debilitation in the venous supply of the pelvic organs; prevention of the habitual retention of urine, which weakens the bladder and presses the uterus backwards; avoidance of climbing stairs of high city buildings, both at home and at school; excess of sedentary habits, with lack of good muscular exercise; the use of ill-applied or tightly laced dresses, all fall to doctor's practice. A good, well fitting, easy corset is far superior to the custom of tying heavy skirts tightly about the waist,

to drag down the abdomen, displacing all organs beneath it.

The bearing of these points upon future parturition are rarely considered by the woman or her parents, and frequently neglected by the family physician. Diet in pregnancy is important to consider. The prospective mother is now eating for two persons instead of one. The child must be made from the constituents of the mother's food, and by controlling this we control the condition of the child's body at birth. The head and bones of a child shape themselves to the parturient passage, if they be soft and cartilaginous, while delay and distress to the mother occurs where the bones of the child have become so far ossified as to make them but slightly yielding.

The idea of keeping the fetus small by starving the mother during pregnancy has been tried from time to time, but it must be remembered that the fetus acts as a true parasite and takes good care of itself and its own nutrition without any regard to the results to the mother. It is well known that well nourished children are frequently born of women suffering from advanced disease and much emaciated. Bedone reports on the difference between the fetal and maternal blood in cases of anemia during pregnancy. He reports nine cases, in one of which the red corpuscles in the fetal blood were over 4,000,000,000 as compared with 928,000 in the maternal blood. In another case there were 5,800,000 fetal blood as compared with 600,000 in the maternal blood. From this data this authority concludes that extremely anemic women may bear healthy children.

The food eaten by the mother during gestation can be regulated as easily as a person can be fattened or reduced in adipose tissue. Those foods which contain large quantities of earthy phosphates should not be permitted. The patient should use starchy foods, as white bread, potatoes, with vegetables, and especially fruits. The latter acting in a twofold manner, the bowels free, causing a solution of the earthy salts of other articles of diet carrying them off by the kidneys. A softer, more cartilaginous condition of the bones of the new-born infant will result when the mother eats largely of acid fruits during pregnancy. Prochownik has prepared a diet for women with narrow pelvis or with whom dystosia has been due to the size of the fetus. It consists in giving, during the last three months of pregnancy, roast and boiled meats without sauces, fresh green vegetables, salads, cheese, butter in small quantity. With the prejudice against water, shared by all Continental writers, he forbids its use and gives light wine instead. No sugar, but saccharin is given,

while potatoes, soups, farinaceous foods and beer are prohibited. A German physician has, according to the *Medical Age*, tried this method during the last two years, and asserts "that the children come into the world small and thin, and depleted of fatty tissue. The passage of the pelvic strait is easily accomplished, always more easily than in ordinary conditions. The method is applicable in three classes of cases: First, in those of narrow pelvis, in which this effect is not inordinately accentuated, if this be so, premature delivery is the only resource. Secondly, in cases in which the dystosia has previously been due to the excessive dimensions of the fetus. Thirdly, in cases of primiparae of over thirty years of age.

"The regimen is one which it is claimed can be tried without danger to the mother, and the ulterior development of the child goes on normally and without prejudice."

After birth change the diet of the mother to the varieties of food previously prohibited, which will supply bone-making material through her milk to the nursing infant. Pelvic trouble of all kinds must be carefully looked after and corrected, especially inflammatory conditions. Occasionally, pelvic inflammation producing pain upon digital examination will exist for several months during gestation and continuing even after labour is over.

Give local treatment to a pregnant woman, and immense relief follows thereby. These applications may be used from the beginning of pregnancy to the day for parturition without injury if carefully and judiciously administered. The occurrence of varicose veins in the lower limbs or vulva is a sign of pressure by the gravid uterus upon the veins of the pelvis, demanding correction.

An antiseptic wool tampon in the vagina, renewed every three to five days, is excellent here, acting as an elastic cushion for the heavy uterus to rest upon, taking the pressure from the veins. The dorsal position is also of assistance to relieve this condition. Baths and vaginal injections at all times are excellent. Occasional vaginal douches, particularly if made antiseptic by some of the weaker germicides, tend to keep the genitals in a healthy state of tonicity and to prevent the entrance of germs.

In the last week of pregnancy, hot hip baths, enemata, vaginal douches, and hot wet cloths, and in the earliest stage of labour, relax the perineal and sphincter muscles, allowing an easy passage of the fetus. Nothing will make flaccid the perineal tissues and relax the sphincters of uterus, anus and vagina so satisfactorily as heat and moisture. But the water must be hot for use in the hip bath, injection, or by means of saturated cloths to peri-

neum. A temperature of 118° F. must be continued for a long time. In cases of uterine inertia the hot douche stimulates muscular contractions of the uterus as well as to relax the tissues below.

Contractions of the uterus are stimulated by the presence of the examining fingers in the vagina, but as frequent examinations are both dangerous and unpleasant, the hand should be placed in position only after a thorough antiseptic cleansing.

The physician should learn the position of the child before labour begins, if possible, and if a breech or lateral presentation occur it should be changed to a head presentation. Perform cephalic version, if possible, two weeks before expected labour. It is done by the patient lying on her back with her knees and thighs flexed, while rotary passages are made by the hands of the physician on the abdomen in such a manner as to press the child's head into the pelvis and bring the limbs uppermost. The genu-pectoral position during this manoeuvre will materially assist in its success.

The clothing of both bed and patient should receive the doctor's attention. It is unnecessary to say they should be clean. Any old cloths, possibly loaded with germs, will not do. Under the bed sheet should be spread a sheet of rubber or common table oilcloth, to protect the bedding beneath. The patient should wear a warm undervest and clean nightdress, neatly and smoothly folded or rolled up almost to the armpits; a roll of cloths or towels placed in the hollow of the back to prevent the clothing working downward, and also to prevent blood or other discharges working upward. Have her put on a clean wrapper, to be taken off after the labour is over. Such preparation will save much discomfort during and after parturition.

Lister was the pioneer in demonstrating the arrest of pus formation building on the work of Pasteur, while Surgery has taught obstetrics the sterilization of instruments as well as the ways of preventing sepsis. No greater advance was ever made than the introduction of asepsis, and antiseptics applied to obstetric work has proven the physical redemption of thousands of parturient women. Even if the accoucheur has large experience and great skill, and yet does not render himself, the nurse, and his patient aseptic, he fails in the most vulnerable point. The high degree of antiseptics of the surgery of the abdomen should be the type of cleanliness for the obstetrician.

All prolonged or difficult and especially operative labours should be treated with the greatest care, for fresh abrasions and deep lacerations seem to reach septic germs.

The hand of the physician and of the nurse should not ever touch the genitalia without having been carefully washed at the moment. The unsterilized hand is unfit for obstetrics.

In Europe there has been recently inaugurated training schools for midwives, but the sacredness and responsibility of obstetric work makes the idea of giving it to midwives most repellant to an American. In these days when such noble and inspiring effort is being made to elevate the standard of qualification in medicine, why should this branch be degraded? This midwife *débris* should be suppressed. Even in such a city as Baltimore, with more than 600 doctors, there are 75 midwives who attend relatively a very large proportion of the labour cases. With the raising of the standard of medical education in this country in the interest of the people, why should the poor and ignorant be left to the mercy of the untutored midwives? Especially when now the young doctors, infinitely better qualified, are longing for practical opportunities in obstetric work.

If the amniotic fluid be lost before labour begins, or should the pains stop after the fluid is discharged, restoration of parturient contractions is in order. Dry births, with their attendant misery and suspense to the mother and danger to the child, might be obviated if the physician be enterprising enough to assist nature to throw off the child, owing to a lack of tonicity in the muscular structures of the mother. This is done by gently kneading the abdomen to incite uterine contractions with one hand, at the same time dilating the os by the fingers of the other hand to secure both contractions and an open passageway for the child.

Nature often produces by reflex action by more or less severe vomiting, having the effect of relaxing the parturient canal and materially assisting in delivery. Janvier suggests that emesis can be induced by having the patient drink large quantities of luke warm water, which is easily thrown off by the stomach producing general muscular relaxation.

Chloroform as a relaxant is used largely abroad, but not so extensively in this country, to secure a partial immunity from the agony of uterine contractions. In small doses it has seldom proved harmful; given with a free hand it causes a lessening or even a cessation of pains and thus prolongs the labour beyond a normal duration. Given in short inhalations at the time of severest pains it is one of the most valuable agents we have in securing

easy parturition, and will not tend to produce post partum hemorrhage unless used after the uterus is emptied of the greater part of its contents.

Occasionally in prolonged labour, where the strength of the patient has given out and the pains have ceased altogether, a large hypodermic injection of morphine temporarily checks the labour and gives the patient rest and sleep, lasting from one to several hours. On awakening the pains start with renewed vigour and the patient is in a much better condition.

Cocaine has been recommended for lessening the pain from the intense pressure and stretching exerted upon the vagina, vulva, and perineum. Introduced in cocoa butter suppositories, or wrapped in a small pledget of cotton, about the time the head impinges upon the perineal tissues it has received favourable reports; slowly dissolving it spreads itself over the mucous membrane of the pelvic outlet, producing an anesthetic effect which lasts about an hour. If there be a lack of the natural lubricating discharges, the cocoa butter suppositories are best, otherwise the cocaine applied on cotton, or even on the ends of the fingers, answers every purpose and is more convenient. I have been told many times that the patient dreaded most the last, severe, expulsive pains; and the immunity from suffering offered by this simple procedure has been very gratifying to both patient and physician. The danger of absorption has not been reported.

The umbilical cord should not be cut at once, for after expulsion of the child more blood is pumped into the babe than returns to the mother. Wait until pulsation has nearly or entirely ceased. This secures a greater supply of blood for the child and reduces the size of the placenta.

Squeezing of the uterus, as though it were an orange, through the abdominal walls is excellent to stimulate contraction so that the secundines can be expressed entire, without any traction upon the cord. Traction delays delivery by pulling the flat surface of the placenta to the mouth of the womb instead of the edge of the rolled up placenta. This procedure of expression empties the uterus of all the clots and *débris*, and leaves it in a condition for the continuance of gentle tonic contraction, less exposed to spasmodic after-contractions.

This tonic contraction of the uterus after labour not only rids many after pains, but frees the organ from clots, and danger of sepsis is obviated, and the uterus is in a better condition for involution. For a large and flabby uterus, give small doses of ergot or viburnum four or five times daily for several days or even weeks.

Ergot in labour has become much restricted in late years. It often does as much harm as good, and produces much suffering by its cramping, spasmodic contractions. It tends to contract only the middle or lower portion of the uterus, hindering expulsion. Far better in the majority of cases is friction or massage of the abdomen above the uterus. Future experiences will probably demonstrate that it is superfluous and oftentimes dangerous in securing easy parturition. Quinine is a better oxytocic, producing a more natural, intermittent contraction than ergot. But remember, nature intended parturition to be a physiological process; hence, interfere as little as the case permits. —*Medical Times*.

INSOMNIA.

BY DR. FRANCIS CROSSON, ALBUQUERQUE, N. M.

Along with the heat and rush of modern industrial development have come new and strange manifestations of disease not heretofore common in medical and surgical practice. Among these there is perhaps none more frequently encountered to-day by the average practitioner than insomnia. It is not always an easy matter to get behind the cause or causes responsible for the production of this condition; nor need its presence be invariably attributable to pathological factors per se. A form of insomnia now commonly met with can be traced to a purely psychological cause, and the presence of a disease is not necessarily a concomitant. I have had many such cases,—patients refusing to sleep upon retiring. Instead of immediately relaxing mind and body, the mental clock is wound up, so to speak, and free and unrestrained vent given to the thoughts, which are permitted to run wild, traversing in mental introspection a vast field, and reviewing an enormous number and variety of subjects, that pass with marvellous rapidity before the mental inspection of the patient. In a very short time this habit becomes fixed. The sufferer makes an effort to overcome the growing and stubborn condition, but the habit is not easily uprooted when once it has taken seed and arrived at the stage of fruition. Try as he will, the victim of this condition will find himself or herself powerless, after a short time, to make any headway against this growing insomnia habit. The mind will seek almost unconsciously in the stillness of the night subjects and distractions of one kind or another to fasten its wild riot upon. The senses become

more and more active and alert, until in a spirit of despair the patient suffers himself to relapse into a state of complete wakefulness, accompanied by the peculiar nervous phenomena of this condition, when he or she lies with more or less philosophic resignation upon the sleepless couch, awaiting with anxious expectation the advent of a new-born day. With the approach of dawn, in most cases, a slight feeling of drowsiness occurs, the result, perhaps, of complete physical and mental exhaustion. But, unfortunately for the insomnia victim, this is a poor time to secure the much-needed sleep,—the myriad noises of the day begin now, and increase in volume and variety, until the culmination is reached in the nerve-racking hubbub of our modern large towns and cities.

In attempting to treat successfully such cases as these, certain essentials are obviously required, among the more prominent of which may be mentioned isolation and sequestration from noises of all kinds, complete mental and physical relaxation from business cares, and last, but not least important, the employment of a safe and reliable medicine to produce sleep. The number of drugs employed for such purpose is legion, but few of these are devoid of harm and influence upon the future of the patient, and still fewer are in any sense either efficient or reliable. Like the average medical man, I presume I have run the gamut of many of the more conspicuous hypnotics that have been in use and have enjoyed prominence during the last twelve or fifteen years. Few men to-day care to tamper with the old combinations of chloral, and the bromides, while opium and its alkaloids prove of service only in the case of certain persons, and then only in the hands of judicious and wise doctors. The later coal tar products, while they doubtless served a useful purpose in their earlier career, have been found wanting in many essentials, have never been entirely devoid of direct danger and certain unpleasant sequelæ. About nine months ago I had on my hands three cases of a rather severe type of insomnia. In looking about for a prop to help carry these sufferers along, I decided to try hedonal, about which I had read some very excellent clinical reports recorded by men of standing and note in Germany. I set about the use of this preparation with all the preconceived pessimism which comes with years of therapeutical experimentation. To eliminate any doubt as to its value, the tests made by me were severe and sufficiently varied in character to satisfy my mind in all essentials. Now, after nine months

of careful observation on the action of hedonal, I am prepared to testify to its usefulness in the simpler forms of insomnia, especially those of physical origin. In the insomnia of advanced tuberculosis it has likewise proved of great value in my hands, securing to the sufferer calm and restful sleep night after night, for weeks and months, without harmful results.

The cases in which I employed hedonal embrace dipsomania, morphinomania, pulmonary and laryngeal tuberculosis, tubercular empyema, acute follicular tonsillitis, pleuritis, hallucinations following ovariectomy, neurasthenia following excessive mental work and severe physical strain. The variety of conditions in which I have resorted to hedonal has been sufficient to enable me to draw some general conclusions in regard to this new chemical compound.

1. I have found it safe to administer hedonal in all the above diseases, night after night, or in some instances upon alternate nights. In my hands its use has not been attended with unpleasant consequences, except in one instance, a gastritis lasting five or six days; but as this patient had been taking heroic doses of heroin prior to my employment of hedonal, I am not entirely satisfied that the stomach disturbance was not as much due to the use of heroin as it was to hedonal.

2. I have not found any indications of cardiac depression following doses of forty grains of hedonal.

3. It seems to be entirely devoid of cumulative effect, and is apparently rapidly eliminated from the system

4. It produces sleep a few moments after administration, and the number of hours of sleep can in most instances be regulated by the dosage. I have employed hedonal in fifteen grain doses for forty to fifty consecutive nights, without the slightest deleterious effect upon any of the vital organs or functions. I have made, while using this drug, frequent analyses of the urine, but have failed to find any evil influence upon the function of the kidneys. Hedonal can be discontinued at any time. It creates no habit nor the necessity for any other hypnotic to take its place.—*Occidental Medical Times*.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

J. BRADFORD McCONNELL, M.D.

Associate Professor of Medicine and Neurology, and Professor of Clinical Medicine
University of Bishop's College; Physician Western Hospital.

THE ETIOLOGY OF ACUTE DYSENTERY IN THE UNITED STATES.

The problem of the authors has been to determine by comparative study whether the organisms described by the various observers (Shiga in Japan, Flexner and Strong in the Philippines and Kruse in Germany) are not really of the same species, though possessed of individual differences and peculiarities, and to discover the cause of acute dysentery in this country, and, if possible, to identify it with the organisms of the observers mentioned.

The authors describe in detail the technique, which consisted in examination of the stools of persons supposed to have dysentery and the intestines of several fatal cases of the disease. Agar plates were made from bouillon suspensions of the dejecta, and were incubated for twenty-four hours. The colonies after this time resembled very closely those of the colon bacillus. Inasmuch, however, as the colon bacillus produces gas in glucose agar, while the dysentery does not, simple stabs from the colonies into glucose agar readily differentiates the two.

Before the organism under consideration can be considered to be the *B. dysenteriae* it must fulfill the following requirements: (a) It must give the proper culture characteristics as shown by standard cultures of Shiga, Flexner, Kruse, etc.; (b) It must possess the right morphology as shown by the same; (c) It must give a positive agglutinative reaction with some of the known dysenteric sera.

The authors report the study of twenty-two cases, five of which occurred in Philadelphia, three from the Lancaster Company Insane Asylum; the remainder were obtained at the Springside Home, New Haven, Conn. From all these cases the *B. dysenteriae* were isolated.

With the view of determining the relationship between the various bacilli described by Shiga, Flexner, Kruse and

Strong, and the authors, a series of parallel cultures of all these was made, beginning with agar plates, and carrying them through all the common culture media. While a slight difference was observed between the varieties, these were not constant enough or sufficient to distinguish one set of cultures from the other unless the name of the organism was known beforehand. Therefore, the conclusion was reached that the cultural characteristics of the various forms studied are essentially alike.

As to the morphology of the organism, it is a slender rod with rounded edges. It stains with aniline dyes, but not by Gram's stains. By a special method the authors were enabled to demonstrate numerous flagella. The authors, as Kruse, could detect no motility, whereas Flexner and Shiga describe the organism as motile. Considering, however, that the organism is flagellated, it is possible that under certain conditions it does possess motility.

The study of the agglutinative reactions likewise gave interesting and positive results. The tests consisted (1) of the reaction of the patient's blood with the cultures of Shiga, Flexner, Strong and Kruse; (2) of the reaction of the bacilli isolated by the authors with the patient's blood, and (3) the reactions toward Shiga's antidysenteric serum. In conclusion, the following are the authors' opinions:

1. The several standard cultures used in the study are indistinguishable—a conclusion previously stated by Flexner.
2. The acute dysentery of the United States is due to a bacillus indistinguishable from that obtained from the epidemics of dysentery in several parts of the world.
3. The sporadic and institutional outbreaks of acute dysentery are caused by the same micro-organisms, and this organism is identical with that causing epidemic acute dysentery. (See review of Kruse's article on this point.)
4. The cause of acute dysentery, whether sporadic, institutional or epidemic, is *B. dysenteriae* Shiga.—Vedder and Duval, *Journal of Experimental Medicine*, February, 1902.—*Maryland Medical Journal*.

PRESENT STATES OF DYSENTERY.

Kruse gives a systematic résumé of the various forms of dysentery, which, although resembling each other clinically, have been shown in their pathological anatomy as well as etiologically. Without believing that the last word has been said as to the etiology, he divides dysentery into four groups:

- I. The German epidemic dysentery, due to the bacillus

which he himself has isolated (Bac. dysenteriae Germanicae).

II. The dysentery of the Philippines and Japan (Flexner and Shiga).

III. The atypical dysentery which occurs partly sporadic, partly in small epidemics, especially in insane asylums, and are probably due to several different types of pseudo-dysentery bacilli.

IV. The amebic dysentery, which differs from the preceding forms not only etiologically, but also anatomically.—Kruse, *Deutsche Aerztezeitung*, 1902, No. 2. *Maryland Medical Journal*.

TREATMENT OF SYPHILIS WITH INTRAMUSCULAR INJECTIONS OF HERMOPHENYL.

¹ J. A. Nicolle (*La Revue Médicale de Normandie*, April 25, 1902) believes that he has obtained an ideal form in which to administer mercury in hermophenyl. Although many preparations of mercury have been hitherto described for intramuscular or subcutaneous injections, most of them are not free from criticism, for the insoluble preparations of mercury require a long period of time for absorption, and may lead to severe accidents, while the soluble forms are often of very feeble strength, and the fact that they have to be repeated daily renders their use extremely dangerous in the hands of a large number of practitioners.

Hermophenyl is a compound of mercury, phenol and sodium sulphate, containing 40 per cent. of mercury, and very soluble in water. Nicolle has used this drug in ninety-four syphilitic cases in his service at Rouen. Primary, secondary and tertiary cases were all met with in this series. Nine hundred and eight injections in all were used; the solution employed was 1 to 100, the dose 2 c. cm.—that is, 8 mg. of metallic mercury. The injections were given twice a week at first, later once a week. The injections were made into the gluteal muscles, and were never accompanied by any inconvenience.

The results have been more favourable, according to Nicolle, than with any other preparation of mercury. In only one case was a stomatitis observed, which was mild, and followed the eleventh inoculation, while a local induration was noted in two cases at the point of inoculation, without, however, producing any inconvenience. Nicolle, therefore, recommends hermophenyl as a most satisfactory method of administering mercury in specific cases.—*Maryland Medical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

Lecturer on Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

AND

GEORGE FISK, M.D.

Instructor in Surgery, University of Bishop's College ; Assistant Surgeon, Western Hospital ;

SURGICAL TREATMENT OF EMPYEMA IN CHILDREN.

Dowd summarizes as follows:—

(1) For simple cases of empyema the following treatment is used: Excision of about one and a half inches of the seventh or eighth rib in the posterior axillary line; light ether anesthesia is usually employed; the purulent coagula are removed; short rubber tubing, cut partly across, doubled and held by large safety pins, is used for drainage; abundant gauze dressing is applied and changed when saturated.

(2) If the patient's condition contra-indicates general anesthesia, an incision in the chest may be made between two ribs under cocaine anesthesia.

(3) Aspiration is only used to give temporary relief in patients who are in great distress from the pressure of the fluid, or temporarily to relieve the second side of a double empyema after the first side has been opened.

(4) The patients are allowed out of bed as soon as is practicable, and the expansion of the lung is encouraged by forced expiration.

(5) Irrigation is only used where there is a foul-smelling discharge from necrotic lung tissue.

(6) Secondary operations are not done until good opportunity has been given for healing; usually three or four months should have elapsed after the primary operation, and there should have been no noticeable improvement for about a month.

(7) In the secondary operation the expansion of the lung should be encouraged by incising, stripping back, and, if necessary, removing portions of the thickened pulmonary pleura.

(8) The examination of forty-four of the patients at long periods after operation indicates that recovery is usually complete in the simple cases, and that there is surprisingly little deformity in most of the severe cases.—Dowd (*Medical News*, September 12, 1902).

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All communications for the Journal, books for review, and exchanges, should be addressed to the Editor, Box 2174, Post Office, Montreal.

Editorial.

DINNER TO DR. C. A. WOOD, OF CHICAGO.

On the 22nd of December a complimentary dinner was given in the Club room of the Windsor hotel, Montreal, to Dr. C. Albert Wood, of Chicago. About forty medical men sat down, and the dinner was unique in a way, those present consisting of present and past members of the Medical Faculty of Bishop's College, from which University Dr. Wood graduated in 1877. This combination brought not only the members of the Faculty of his Alma Mater, but several of the leading members of McGill University Faculty of Medicine to do honour to the guest of the evening. Dr. F. W. Campbell, Dean of Bishop's Faculty of Medicine, occupied the chair, and had on his right the guest of the evening, and on his left Dr. Roddick, M.P., Dean of McGill, who was present as the guest of the Medical Faculty of Bishop's. In reply to the toast of "Our Guest," Dr. Wood made a feeling reply, alluding to his long residence as a practitioner in Montreal, which he looked upon even yet as home. Dr. Roddick replying to the toast of the Faculty of Medicine of McGill said that if some years ago there was friction between McGill and Bishop's, those days were passed, and the two Schools of

Medicine stood shoulder to shoulder for the advancement of medical teaching in Canada.

Dr. Wood, who for several years was a Professor in Bishop's, is now the leading oculist in Chicago, and his reputation extends all over the northwest of the United States. The dinner was under the charge of a committee consisting of Drs. G. T. Ross and Dr. George Fisk. Bishop's men are exceedingly proud of Dr. Wood's record, and by all his old friends he was warmly welcomed to Montreal.

FOUR HUNDRED DOLLAR PRIZE.

Dr. J. B. Mattison, Medical Director, Brooklyn Home for Narcotic Inebriates, offers a prize of 400 dollars for the best paper on the subject:

Does the habitual subdermic use of morphia cause organic disease?

If so, what?

Contest to be open two years from December 1, 1901, to any physician, in any language.

Award to be determined by a Committee: Dr. T. D. Crothers, Hartford, Conn., Editor Journal of Inebriety, Chairman; Dr. J. M. Van Cott, Prof. of Pathology, Long Island College Hospital, Brooklyn, and Dr. Wharton Sinkler, Neurologist to the State Asylum for the Chronic Insane, Philadelphia.

All papers to be in the hands of the Chairman, by or before 1st December, 1903, to become the property of the American Association for the Study and Cure of Inebriety, and to be published in such journals as the Committee may select.

A STUDY OF BACTERIAL CELLS.

The University of Michigan "News Letter" of November 21, says:—"The report of the Rockefeller research in the hygienic laboratory of the University of Michigan, for the year 1902, has recently appeared in pamphlet form. It is

taken from 'The Transactions of the Association of American Physicians, 1902.' The work, 'A Study of Bacterial Cells,' was carried on under the direction of Dr. Victor C. Vaughan, in the laboratories of the University. By means of large incubating tanks devised by Dr. Vaughan, cellular substance of pathogenic bacteria was obtained in large amount. It was with material thus obtained that all the experiments were carried on. The research work was not confined to toxins alone, but a broader study of cellular chemistry was attempted. Incidentally an opportunity offered itself for the study of some of the bacterial pigments which were found in the tank growths in large quantities. The germs were scraped from the tanks with glass rods, and repeatedly extracted with alcohol. In many cases the extractions were made with water. The alcohol seemed to harden the cells.

"The pamphlet contains the following papers:—

"I. Introduction, Victor C. Vaughan, M.D., LL.D.

"II. A preliminary Report on Certain Bacterial Pigments, A. J. Detweiler, A.B., M.D.

"III. The Toxicity of the Dry, Sterile Cells of certain Non-Pathogenic Bacteria, A. J. Detweiler, A.B., M.D.

"IV. The Chemistry of *Sarcina Lutea*, May Wheeler, A.B.

"V. The Chemistry of the *Bacillus Coli Communis*, Mary F. Leach, B.S.

"VI. The Toxicity of the Cellular Substance of the Colon *Bacillus*, Charles E. Marshall, Ph.D., and L. M. Gelston, A.B.

"VII. The Interacellular Toxins of the *Diphtheria Bacillus*, L. M. Gelston, A. B.

"VIII. The Anthrax Toxin, J. Walter Vaughan, A.B.

"IX. Conclusions, Victor C. Vaughan, M.D., LL.D."

Personals.

Dr. Shirres, of Montreal, has accepted the position of Professor of Nervous Diseases, in the University of Vermont.

Dr. T. Parizeau has been appointed to succeed the late Dr. Brunelle as Professor of Pathology and Surgery in the Medical Faculty (Montreal) of Laval University.

Dr. Rorke M.D., McGill, 1893, has been appointed Lecturer on Histology in the Medical Faculty of Bishop's University, Montreal.

Dr. George Hall (M.D., Bishop's, 1896), has been appointed Lecturer on Physiology, in succession to Dr. Bruère, in the Medical Faculty of Bishop's University, Montreal.

Dr. C. A. Dugas, who for some years was assistant to the late Dr. Wyatt Johnston, Montreal, official autopist, has succeeded to the chief position. He will have for his assistant Dr. D. D. McTaggart.

Dr. Derome and Dr. Brennan, of Montreal, have returned from attending the International Congress of Gynæcology and Obstetrics, which was held in Rome, the middle of September.

Dr. C. H. Christie, a graduate of Bishop's, 1901, has been appointed surgeon on the steamship "Wyamaga," which recently sailed from England for the West Coast of Africa.

Dr. Sharkey, who has been appointed Professor of Hygiene in the Faculty of Medicine of McGill University, has arrived from England. He made his first speaking appearance before the students at the McGill Medical dinner, held at the Windsor Hotel, on the 8th December.

Dr. Martineau has returned from Grosse Isle, the quarantine being closed.

Dr. Austin, of Sherbrooke, was in Montreal on the 18th December, to visit his brother who has been quite ill. He called upon the editor.

Dr. J. A. Hamilton (M. D., Bishop's, 1900), has settled in Tacoma, Washington Territory, and has selected a specialty—nose and throat. He has written the editor for an assistant.

Dr. C. A. Fortin (M. D., Bishop's, 1897) has almost, since his graduation, been at sea. At present he is surgeon on the R.M.S. "Orissa," His Majesty's Transport No. 18, and writes us from Bermuda, under date of December 6. We extract the following from his letter: "I hope to be back in Canada soon and renew acquaintances with my old friends after over five years' absence. I am at present on the crack transport and am seeing a bit of the world. We have been out to the Cape twice, India once, and now on the West India route, picking up the black troops, and shipping them to their various stations."

Book Reviews.

A Treatise on the Eye, Nose, Throat and Ear.—For Students and Practitioners. By Eminent American and English Authors. Edited by William Campbell Posey, M.D., Surgeon to Wills Eye Hospital, Philadelphia, and Jonathan Wright, M.D., Laryngologist to the Brooklyn Eye and Ear Hospital, etc. In one octavo volume of 1,234 pages, with 650 engravings and 35 plates in colours and monochrome. Cloth, \$7.00 net; Leather, \$8.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York.

This volume of over twelve hundred pages has been arranged so that the various special departments may be treated in a manner at once authoritative, comprehensive and practical, by men whose names are well known in the medical world. The authors have aimed to adapt the book particularly to practitioners and students, but even specialists will find the recent views of their *confrères* to be interesting reading. One practical feature about it is that each contributor has treated his subject in its entirety, so that repetitions have been avoided. Pathology and symptomatology have been dealt with liberally, while anatomy and physiology have been omitted to a marked degree. To the practitioner the chapter on the eye in its relation to general diseases will commend itself. The printing is very clear, the paper good, while the engravings and monochromes are excellent, the entire book being one which will prove helpful to any medical man.

G. T. R

A Nurse's Guide for the Operating Room.—By Nicholas Seward, M.D., Ph.D., LL.D., C.M., Professor of Surgery, Rush Medical College in affiliation with the University of Chicago, Attending Surgeon to the Presbyterian Hospital, Surgeon-in-Chief of St. Joseph's Hospital, Professional Lec-

Clinical Methods.—A guide to the Practical Study of Medicine.

By Robert Hutchison, M.D., M.R.C.P., Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond street, and Harry Rainy, M.A., F.R.C.P. Ed., F.R.S.E., University Tutor in Clinical Medicine, Royal Infirmary, Edinburgh, with 150 illustrations and 8 coloured plates. Fifth Edition. Ninth thousand. Chicago, W. T. Keener & Co., 1902.

This little volume—little only in the size of its pages—for it consists of six hundred of them, was first published in 1897, since which it has gone through five editions. The last one brings it thoroughly up to date, though the author in his preface says “many methods which have been recently proposed are not included in the volume; some because they have not yet been sufficiently proved, others—and this holds true especially of chemical analyses—because they are too complicated for clinical use where simpler though less accurate procedures suffice.” We have examined the work very thoroughly and have no hesitation in saying that it should be in the hands of every medical student. Without such a book to fall back upon and guide him in his hospital work, he is like a vessel without a rudder.

F. W. C.

International Clinics.—A quarterly of clinical lectures and especially prepared articles on all branches of Medicine and Surgery and other topics of interest to students and practitioners. By leading members of the Medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A., with the collaboration of John B. Murphy, M.D., Chicago; Alex. D. Blackader, M.D., Montreal; H. C. Wood, M.D., Philadelphia; T. M. Rotch, M.D., Boston; E. Landolt, M.D., Paris; Thos. G. Morton, M.D., of Philadelphia; James J. Walsh, M.D., New York; J. B. Ballantyne, M.D., of Edinburgh, and John Harold, M.D., of London, with regular correspondents in Montreal, London, Paris, Leipsic and Vienna; volumes II. and III., twelfth series. J. B. Lippincott & Co., Philadelphia, 1902. Canadian Agent: Charles Roberts, 1524 Ontario Street, Montreal.

Volume II. contains twenty-eight articles on as many different subjects, by leading clinicians from America and Europe.

Professor R. Lépine, of Lyons, France, has an article on the Treatment of Diabetes. R. Romme, M.D., of Paris, writes on Gersung's method of Prothesis, by Subcutaneous and Submucous Injections of Vaseline. The method of employing the vaseline is explained and the deformities and various other conditions in which it has been found useful pointed out; Treatment of Bladder and Rectal Troubles in Nervous Diseases, by L. R. Müller, M.D., of Erlangen, Germany; Treatment of Acute Urethritis, by

turer on Military Surgery, University, Chicago; Chief of the Operating Staff with the Army in the Field during the Spanish-American war, Surgeon General of the State of Illinois. Published under the direction of the Sisters of Charity, St. Joseph's Hospital, 360 Garfield Av., Chicago. W. T. Keener & Co., 90 Wabash Av., Chicago.

A useful little book which is bound to meet with appreciation; the author's name is a sufficient guarantee for its merits. It is thoroughly up to date, and the operating-room nurse who reads and inwardly digests its contents will be a great comfort to the surgeon under whom she works. Full and systematic instruction is given—preparation of operating room and the preparation of the patient for any and many special operations. It is a book of details—from hand washing and the preparation of ligatures and dressings to what to do in emergencies and the various wound complications. The chief operations are mentioned, and a list of the instruments required in each is given. After-treatment of laparotomy cases is indicated and the nurse is advised to place such medicines and articles as may be required on a little table close at hand where they may be had in a moment and without delay. The little book has been well thought out and will be found of real worth. It has been well named the "Nurse's Guide."

F. R. E.

Woolsey's Surgical Anatomy.—Applied Surgical Anatomy regionally presented for the use of Students and Practitioners of Medicine, by Geo. Woolsey, A.B., M.D., Professor of Anatomy and Clinical Surgery in the Cornell University Medical College; Surgeon to Bellevue Hospital, etc. Octavo, 511 pages, 125 illustrations, including 59 full-page inset plates in black and colours. Cloth, \$5.00 net. Leather, \$6.00, net. Lea Brothers & Co., Philadelphia and New York, 1902.

The author has from the beginning to the end of his book shown himself to be a true teacher. Anatomy and even surgical anatomy as generally treated is heavy, dull and often difficult. In this work the various parts and regions are presented in such an interesting and practical way that points, which before seemed intricate and difficult, now stand out surgically clear and full of interest. The excellent plates and cuts help much to increase the value of the book. A true teacher is able to simplify and make what is obscure and difficult, easy and attractive. Dr. Woolsey has certainly done this. He has presented a book on the very groundwork of surgery, and it is sure to be appreciated by the men who operate. It is generously filled with practical surgery reminding us in many ways of that old and valuable little work on surgical applied anatomy by Frederick Treves.

F. R. E.

Part II. of Barissov's article on the function of the digestive gland based on the researches of Pavlof and his pupils, which appears here, concludes the subject. It represents the substance of some fifty-six papers written by Pavlof and his collaborators. The last article is an exhaustive one on the Critical Study of the theory of Inflammation, by Hans Schmaus, M.D., Prof. at the University of Munich. Many of the articles in both these volumes are illustrated by plates and figures.

J. B. McC.

The Public and the Doctor—By a regular Physician. Published by Dr. B. E. Hadra, Dallas, Texas, U. S.

We presume that the writer and publisher of this little book of one hundred and forty-nine pages are the same. The intention of publication is a laudable desire that the intellectual and thinking public should have a good conception of the claims which a truly scientific physician has upon them. For the public it is therefore intended, and that it should reach them it is the desire of the author that doctors distribute it among their clients at a cost of fifty cents each copy. We have read the book carefully, and freely acknowledge that it is in truth a missionary document of very considerable value. We question, however, whether there are many, or indeed any, except where exceptionally large incomes exist, who would feel inclined to subscribe from one hundred dollars upward, to send this missionary book on its mission of educating the public on the blessings of Scientific Medicine, and the cause of quackery, and the various medical fads, which everywhere abound. The intention of the author is most praiseworthy—his work is really excellent reading—but how many will be willing to place a considerable sum outside of their pockets to extend its circulation. We hope some at least will do so, but our experience leads us to believe they will be few. F. W. C.

Schmidt on Venereal Diseases. Lea's Series of Medical Epitomes.—A Manual of Genito-Urinary and Venereal Diseases for the use of Students and Practitioners. By Louis E. Schmidt, M. D., of the Chicago Polyclinic. In one handy 12mo volume of 250 pages, with 21 illustrations. Cloth \$1.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1902.

This work has been designed by Dr. Schmidt more especially to meet the needs of the medical students who are taking up this branch of work for the first time. As such it is very creditable and enables a student to review in a short time the main features of the venereal diseases. The work is concise, yet clear and well arranged. It is especially strong on treatment, and is even more explicit in this than many larger works. We are pleased to note the arrangement of the host of remedies for acute gonorrhoea and the excellent remarks on their indications. A list of questions is given at the end of each chapter which may be used in reviewing the subject.

G. F.

Prof. Ernest Finger, of the University of Vienna ; Passive Movements and Massage for the Treatment of Fractures, by Prof. Lucas, Championniere, University of Paris ; Two cases of Immediate Death Caused by the Spinal Injections of Cocaine, by F. Leguen, M.D., Surgeon to the Paris Hospitals ; Pachymeningitis Hæmorrhagica, as a Cause of Drunkard's Death, by Prof. Arnold Pick, University of Prague ; The Presence and Significance of Beta-Oxybutyric Acid in the Urine of Diabetics and its Relation to the Coma, by Carstairs Douglas, M.D., etc., Glasgow ; Gastro-Intestinal Auto-Intoxication, by John C. Hemmeter, M.D., Baltimore ; Resection of the Cervical Sympathetic, by Prof. Thomas Jonesco, Bucharest, Roumania. Some excellent results are recorded here from the application of this means in epilepsy, Basedow's disease, etc. ; Radical Cure of Inguinal and Femoral Hernia, Sliding Hernia, Hydrocele of the Canal of Nuck, Epithelioma of the Face, Sarcoma of the Upper Jaw, by William B. Caley, M.D., New York ; also articles by Charles Gibbs, F.R.C.S., Eng. ; N. Senn, M.D., LL.D. ; H. A. Kelly, A.M., M.D. ; Guy Hinsdale, A.M., M.D., who gives a biographical sketch of John B. Murphy, of Chicago.

Of special interest also are the articles on the organization and work of the Medical Department of the United States Army, by E. L. Munson, A.M., M.D., and the first part of a paper on the Function of the Digestive Glands, based on the researches of Pavlov and his pupils, by Peter Barissof, of St. Petersburg.

Volume III., just issued, is also replete with interesting and instructive articles, not one of which the reader of the volume can afford to miss.

Among those of special interest are the articles on the Treatment of Typhoid Fever, by A. T. Osborne, M.A., M.D., of Yale University ; Treatment of Intestinal Perforation in Typhoid, by Noel Manger, M.D., of Versailles ; The Treatment of Morphineism, by T. D. Crothers, Prof. Nervous and Mental Diseases, New York School of Clinical Medicine ; The Diagnosis and Treatment of Osteomyelitis, by P. Mauclaire, M.D., surgeon to the Paris Hospitals ; Treatment of Deafness by Direct Massage of the Ossicles of the Ear, by Dr. Charles J. Koenig, Laureate of the Faculty of Medicine, Paris ; Means of Telling Whether an Attack of Serofibrinous Pleurisy is Tuberculous by G. Dieulafoy, M.D., Paris ; Insect Pests of Human Beings, by James J. Walsh, M.D., Ph.D., New York Polyclinic ; Treatment of Dilatation of the Stomach, by Gastro-Enterostomy, by G. M. Debove, Paris Faculty of Medicine ; Surgical Intervention of Cases of Great Dilatation of the Stomach, by Prof. Antonio Cardarelli, University of Naples, Italy ; Abdominal Tumour, by J. M. Baldy, M.D., Philadelphia ; The Treatment of Cases of Face Presentation, by Robert Jardine, M.D., F.R.S.E., University of Glasgow ; The Faucial Tonsils, the Indications for Their Removal, and the Best Methods by which to Accomplish it, by Francis R. Packard, M.D., Philadelphia Polyclinic.

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